FIBERS SITE GROUP

August 9, 2018

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Subject: **Second Semi-annual 2017 Groundwater Monitoring Report**
Fibers Public Supply Wells Site
Guayama, Puerto Rico

Dear Mr. Bosque:

On behalf of the Fibers Public Supply Wells Site Settling Defendants, we are submitting the attached Semi-annual Groundwater Report for 2017 prepared by ARCADIS. The appendices and attachments are omitted from the printed copy however they are included along with a complete electronic copy (PDF) of the report on the enclosed compact disc.

Please feel free to contact Mr. James Kirschner of ARCADIS at (602)797-4519 or me at (724)544-4874 if you have any questions or comments regarding this submittal.

Sincerely,

Joe Biss
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Fibers Site Group

SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

Fibers Public Supply Wells Superfund Site

August 2018

SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

Fibers Public Supply Wells Superfund Site

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ACRONYMS AND ABBREVIATIONS

1SAR2016	First Semi-Annual Monitoring Event of 2016
1SAR2017	First Semi-Annual Monitoring Event of 2017
2SAR2015	Second Semi-Annual Monitoring Event of 2015
2SAR2016	Second Semi-Annual Monitoring Event of 2016
2SAR2017	Second Semi-Annual Monitoring Event of 2017
°C	Degrees Celsius
Arcadis	Arcadis U.S., Inc.
Baxter	Baxter International, Inc.
BBL	Blasland, Bouck, and Lee, Inc.
BP	Bladder Pump
cis-1,2-DCE	cis-1,2-Dichloroethene
cm/s	Centimeters per Second
COCs	Constituents of Concern
CORE	Chevron Phillips Chemical Puerto Rico Core, Inc.
CVOCs	Chlorinated Volatile Organic Compounds
DO	Dissolved Oxygen
EB	Equipment Blank
FB	Field Blank
Fibers Group	Fibers Site Group
gpm	Gallons per Minute
GWCC	Groundwater Cleanup Criteria
GWETS	Groundwater Extraction and Treatment System
HDPE	High Density Polyethylene
HSUs	Hydrostratigraphic Units
LDPE	low-density polyethylene
NTU	Nephelometric Turbidity Unit
mg/L	Milligrams per Liter
mS/cm	Millisiemens per Centimeter
MS/MSD	Matrix Spike/Matrix Spike Duplicate

mV	Millivolts
ORP	Oxidation Reduction Potential
Pace	Pace Analytical Services, Inc., St. Rose, Louisiana
PCE	Tetrachloroethene
PRASA	Puerto Rico Aqueduct and Sewer Authority
PWR	Partially Weathered Bedrock
PR-3	Puerto Rico Highway 3
QED	QED Environmental Systems, Inc.
Report	Second Semi-Annual Groundwater Monitoring Report for 2017
RPD	relative percent difference
ROD	Record of Decision
Site	Fibers Public Supply Wells Superfund Site
TB	Trip Blank
TCE	Trichloroethene
TDS	Total Dissolved Solids
TLPE	Teflon® lined polyethylene
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VC	Vinyl Chloride
VOCs	Volatile Organic Compounds
Wyeth	Wyeth LLC

1 INTRODUCTION

On behalf of the Fibers Site Group (Fibers Group), Arcadis U.S., Inc. (Arcadis) has prepared this Second Semi-Annual Groundwater Monitoring Report for 2017 (Report) for the Fibers Public Supply Wells Superfund Site (Site). **Figure 1** is a Site Vicinity Map. This Report presents groundwater elevation data measured in November 2017 and groundwater quality data collected between November 2017 and January 2018. It has been prepared in accordance with the 2003 Revised Sampling, Analysis, and Monitoring Plan (Blasland, Bouck, and Lee, Inc. [BBL], 2003) modifications in the scope of sampling proposed in the First Semi-Annual Report for 2005 (Arcadis, 2005), the First Semi-Annual Report for 2009 (Arcadis, 2009), and modifications in the scope of sampling listed in the Groundwater Extraction and Treatment System Sampling, Analysis and Monitoring Program (Arcadis, 2015). Data in this Report represent “non-pumping” and “pumping” groundwater conditions since the groundwater extraction and treatment system (GWETS) was out of service from September 5, 2017 to December 5, 2017 due to damage and power outages from Hurricanes Irma and Maria. The GWETS was repaired and restarted on December 5, 2017.

To evaluate the current state of the constituents of concern (COCs), the most recent data has been compared to the Second Semi-Annual Groundwater Monitoring Report for 2015 (Arcadis, 2016a), the First Semi-Annual Groundwater Monitoring Report for 2016 (Arcadis, 2016b), the Second Semi-Annual Groundwater Monitoring Report for 2016 (Arcadis, 2017), and the First Semi-Annual Groundwater Monitoring Report for 2017 (Arcadis, 2018). The 2015 groundwater monitoring event represented “non-pumping” groundwater conditions; the 2016 and 2017 groundwater monitoring events represent “pumping” groundwater conditions.

1.1 Site History

Since the 1960s, several industrial facilities have operated in the vicinity of five former Puerto Rico Aqueduct and Sewer Authority (PRASA) public supply water wells located in Guayama, Puerto Rico. Shutdown of the former PRASA public supply wells has been attributed to historical releases from these industrial facilities. A Record of Decision (ROD) was issued in September 1991 selecting a remedy that included pumping impacted groundwater from five extraction wells, and treatment by sediment/particulate filtration and air stripping. Long-term groundwater monitoring was required to assess remedy performance.

In 1992, the Fibers Group entered into a Consent Decree to implement the selected remedy. A Final Design Report was approved in 1995. The 1995 Design Report modified the remedy to include:

- Pumping from five regional extraction wells and two source control wells at a combined rate of 650 gallons per minute (gpm) with a contingency of plus or minus 50 percent.
- Discharge of treated groundwater to the Patillas Canal or to nearby industrial facilities for reuse.

The GWETS began operation in May 1999 and utilized four groundwater extraction wells (RW-1, RW-2, RW-3 and RW-4). A fifth groundwater extraction well (RW-5) was installed in July 2003; groundwater extraction began at RW-5 in December 2004. Groundwater was pumped from the five groundwater extraction wells at a combined rate of approximately 400 to 450 gpm. Groundwater was treated by air

stripping and conveyed to the adjacent Chevron Phillips Chemical Puerto Rico Core, Inc. (CORE) facility for reuse. The GWETS was taken out of service in May 2013 for modernization and repair. The Fibers Group purchased a QED Environmental Systems, Inc. (QED) EZ-48.4SS Tray air stripper assembly to replace the former air stripping equipment. Use of this air stripper was approved by the United States Environmental Protection Agency (USEPA) in a letter dated January 27, 2014 (USEPA, 2014). The former air stripping equipment was demolished and removed from the Site on May 7, 2015. Construction activities commenced on May 27, 2015 to install the QED air stripper, upgraded control systems, and above-ground high density polyethylene (HDPE) treated water discharge pipe. The GWETS returned to service on September 30, 2015 with full system automated operation commencing on October 7, 2015.

Groundwater monitoring has been previously performed in 1987, 1988, 1990, 1993, 1996 and 1998 through 2017.

1.2 Site Conceptual Model Overview

1.2.1 Site Location

The Site is located in the Commonwealth of Puerto Rico, approximately 2 miles north of the Caribbean Sea and 1 mile southwest of Guayama, along Puerto Rico Highway 3 (PR-3). The Site encompasses approximately 540 acres, including a former fibers manufacturing plant, a Baxter International, Inc. (Baxter) facility, and former cane fields. Wyeth LLC (Wyeth) currently operates a pharmaceutical development center and warehousing in the former fibers manufacturing plant. **Figure 2** is a Site Map showing the overall layout of the Site and locations of the groundwater production, extraction, and monitor wells. **Figure 3** is a Site Map showing the Site north of PR-3; **Figure 4** is a Site Map showing the Site south of PR-3.

1.2.2 Site Geology

The Site is situated over the South Coast aquifer of Puerto Rico. The South Coast aquifer consists of coalescing fan-delta and alluvial deposits that range in thickness from about 300 feet to 1,000 feet (United States Geological Survey [USGS], 1999). The deposition of the alluvial material resulted in characteristic grain-size distributions with coarser grained material deposited near the center of relic stream channels and finer grained material deposited laterally and seaward. The regional bedrock geology is complex and characterized by numerous faults that are evident at the Site. Thus, heterogeneous conditions may be encountered and result in development of preferential groundwater flow paths and significant variations in aquifer parameters, such as hydraulic conductivity. This has been encountered at the Site; wells installed in one location yield less water than other nearby wells.

Based on historical Site reports and boring logs, the Site-specific geologic setting was originally conceptualized as a four-layer system. The upper layer consisted of alluvial and fan-delta deposits consisting of interbedded sand, silt, and clay with occasional gravel. The second layer consisted of a relatively thin clay-rich saprolite with an average thickness of approximately 7 feet. The third layer was interpreted to be a weathered bedrock (regolith) unit, and the lowest layer was unweathered bedrock.

However, subsurface Site investigation activities performed by the Fibers Group in accordance with the Subsurface Investigation Work Plan, dated November 2012 (Arcadis, 2012) and the Subsurface

Investigation Work Plan (Revision 1), dated November 2013 (Arcadis, 2013) generated additional information to refine the layered system described above. These new investigations indicated that the hydrostratigraphic units (HSUs) underlying the Site are comprised of three units. In descending order, they are: upper HSU (alluvium), middle HSU (partially weathered bedrock [PWR]) and lower HSU (bedrock). Saprolite, although previously identified at the Site, has not been consistently identified by Arcadis field staff during investigation activities due to either the noncontiguous nature of the unit, or the similarity of the weathered rock to the clay-rich alluvium. The alluvium and saprolite zones most likely have similar hydrogeologic characteristics due to their composition, so for the current understanding of Site geology, the saprolite identified on historical boring logs has been included in the upper HSU (with the alluvium).

1.2.3 Hydrogeology

The results from 2011 hydraulic testing along with interpreted HSUs suggest this is a composite system comprised of a shallow, semi-confined (leaky) alluvial aquifer overlying a deeper, semi-confined (leaky) PWR aquifer system. The alluvium and PWR are the primary flow zones at the Site, with most of the flow likely occurring in the PWR. The groundwater flow direction across the Site is generally south-southwest towards the Caribbean Sea. **Figure 5** is a Groundwater Potentiometric Surface Map (November 2017) and represents groundwater elevation across the three HSUs (composite system) under non-pumping conditions, since the GWETS was out of service during depth to groundwater measurements.

Groundwater is introduced to the alluvial aquifer by recharge from precipitation and infiltration from the Patillas Canal. Rainfall along the south coast is estimated at fewer than 40 inches per year and runoff at approximately 20 inches per year (USGS, 1999). The range of recharge to the South Coast aquifer has been estimated to be between 4 and 12 percent of the total annual precipitation (Kuniansky et al., 2004). Groundwater withdrawal from the South Coast aquifer was estimated to be 74 million gallons per day in 1985 (USGS, 1999). Due to the low recharge and reliance on groundwater for irrigation, public supply, and industrial uses, adverse impacts associated with groundwater mining (e.g., saltwater intrusion) are of concern for the South Coast aquifer.

The South Coast aquifer is in hydraulic connection with the Caribbean Sea, with freshwater in the aquifer overlying saltwater. Under static natural conditions, the location of the freshwater-saltwater interface in the aquifer is approximated by the Ghyben-Hertzberg principal, which assumes an equilibrium state based on the relative densities of freshwater and saltwater. However, under the influence of groundwater withdrawal, saltwater intrusion may occur with the freshwater-saltwater interface moving inland and upward. Saltwater intrusion is characterized as having occurred where groundwater contains greater than 1,000 milligrams per liter (mg/L) of total dissolved solids (TDS; USGS, 1999) or 250 mg/L of chloride. Section 3.3.2 discusses groundwater samples collected and analyzed for chloride.

The hydraulic conductivity values for the Site, based on estimates (a compilation from available studies) for wells screened in both the alluvium and PWR range from approximately 7 to 316 feet/day (2.5×10^{-3} to 1.1×10^{-1} centimeters/second [cm/s]). There is a general pattern in both hydraulic conductivity and yield for wells screened across both the PWR and alluvium. Wells located south of PR-3 tend to have relatively high hydraulic conductivity estimates and well yield; while immediately north of the PR-3, hydraulic conductivity estimates are generally lower. The hydraulic conductivities appear to increase again further to the north as indicated by the high hydraulic conductivities for groundwater production well AWPI-2.

Hydraulic conductivity estimates derived at wells screened only in the shallow alluvium ranged from approximately 0.6 to 9 feet/day (2×10^{-4} to 3×10^{-3} cm/s). This estimated range indicates that the hydraulic conductivity of the alluvium is likely lower than the PWR in the vicinity of the Site. If these values are representative of the shallow alluvium, the hydraulic conductivity of this layer may be an order of magnitude lower than the hydraulic conductivity of the PWR in the vicinity of the PCMW groundwater monitor well series, which are located on the north side of PR-3. Note that these groundwater monitor wells are generally not screened across the entire alluvium and the screened interval may exclude a coarser sand zone.

1.2.4 Constituents of Concern

The primary COCs at the Site are chlorinated volatile organic compounds (CVOCs) and haloethers. Chloride is considered a COC as a potential indicator of saltwater intrusion.

1.3 Objectives

The objectives of this Report are to document data collection activities performed between November 2017 and January 2018 and present the groundwater quality data from the sample analyses.

1.4 Report Organization

The remainder of this Report is organized as follows:

- Section 2 presents a summary of activities performed.
- Section 3 discusses the results.
- Section 4 presents the conclusions.
- Section 5 lists the references used.

2 SUMMARY OF ACTIVITIES PERFORMED

2.1 Groundwater Elevation Measurements

Arcadis personnel gauged depth to groundwater at 75 groundwater monitor and extraction wells on November 6 and November 8, 2017. An electronic water-level probe accurate to within 0.01 foot was used to measure depth to groundwater. The graduated tape of the electronic water-level probe was lowered down each groundwater well until an audible tone was heard, indicating that groundwater was encountered. Depth to groundwater measurements from groundwater monitor and extraction wells were taken from surveyed reference points marked at the top of each well casing. The electronic water-level probe was decontaminated with an Alconox solution and rinsed with deionized water prior to its use in another well. **Table 1** presents the groundwater elevation measurements collected during this event. The observed average groundwater elevation across the Site increased approximately 15 feet compared to data recorded from the previous two groundwater monitoring events. This Site-wide average groundwater elevation increase is attributed to significant rainfall events in the Guayama region during September, October, and November 2017 (Hurricanes Irma and Maria, and other tropical storms).

2.2 Groundwater Sample Collection

Arcadis personnel collected groundwater samples at 73 groundwater monitor and extraction wells between November 8, 2017 and January 16, 2018. In addition to the typical three well casing volume purging and sampling technique, groundwater samples were collected from 12 select monitor wells following a low flow purging and sampling technique (i.e., utilizing a bladder pump). A summary of wells sampled, including analytical and sampling methods used, is presented on **Table 2**.

2.2.1 Groundwater Monitor Wells

Arcadis personnel purged 68 groundwater monitor wells using the standard purging procedures in the USEPA Groundwater Sampling Standard Operating Procedure #2007. Groundwater monitor wells requiring standard purging methods were purged using a 12-volt stainless steel monsoon submersible pump with low flow power booster and polyethylene tubing. Subsequent to purging, groundwater samples were collected from monitor wells using dedicated Teflon® bailers.

Groundwater was typically purged at a flow rate ranging from 0.25 to 2.0 gpm to produce a minimal drawdown of the water column. One groundwater monitor well (MW-11-20) was purged with a peristaltic pump instead of a submersible pump due to issues with well recharge. Subsequent to purging, a groundwater sample was collected from monitor well MW-11-20 using a dedicated Teflon® bailer.

Temperature, pH, specific conductivity, oxidation reduction potential (ORP), dissolved oxygen (DO), turbidity and TDS were monitored through a flow-through analytical cell and recorded using a YSI 6820 or 6920 V2 Sonde at the beginning, middle and end of the respective volume purge. Field parameters measured during the groundwater monitoring event were recorded on field forms which are scanned and stored electronically. **Table 3** presents the groundwater monitoring field parameters collected during this event.

Twelve of the 68 groundwater monitor wells were also purged and sampled following the USEPA 1998, Low Stress (Low Flow) Purging and Sampling Procedures for Collection of Groundwater Samples from Monitoring Wells. The low flow method was used prior to purging and sampling the wells with the standard procedure. The 12 groundwater monitor wells sampled using the low flow purging method were purged using a bladder pump with a controller/compressor combo, dedicated Teflon® bladders, and Teflon® lined polyethylene (TLPE) tubing for the groundwater discharge and low-density polyethylene (LDPE) tubing for air supply.

Temperature, pH, specific conductivity, ORP, DO, turbidity and TDS were monitored using a YSI 6820 or 6920 V2 Sonde through a flow-through analytical cell until stabilization of the water-quality parameters. The groundwater monitor wells were considered stabilized when turbidity remains within 10 percent (or 1 Nephelometric Turbidity Unit [NTU] if turbidity reading is less than 10 NTU), the specific conductance and temperatures values remain within 3 percent, ORP readings remain within ± 10 millivolts (mV), pH remains within 0.1 units and DO remains within 10 percent for three consecutive readings. Field parameters measured during the groundwater monitoring event were recorded on field forms which are scanned and stored electronically. **Table 3** presents the groundwater monitoring field parameters collected during this event. Subsequent to purging, groundwater samples were collected from the dedicated groundwater discharge line.

After each pump use, the pump was decontaminated with an Alconox solution, rinsed with tap water followed by a rinse with deionized water prior to its use in another groundwater monitor well.

2.2.2 Groundwater Extraction and Production Wells

Five groundwater extraction wells (RW-1, RW-2, RW-3, RW-4 and RW-5) located at the Site were included in the semi-annual groundwater monitoring event. Groundwater extraction wells RW-2, RW-4, and RW-5 were operating at the time they were sampled. Groundwater wells RW-1 and RW-3 have not resumed operation since the QED air stripper began treating water in September 2015. Groundwater grab samples were collected from groundwater extraction wells RW-1, RW-2, RW-3, RW-4 and RW-5. Samples from RW-1 and RW-3 were collected utilizing a peristaltic pump with Teflon® tubing. Samples were collected from RW-2, RW-4 and RW-5 utilizing a sampling port in the discharge line associated with the respective groundwater extraction well.

The CORE production wells, PRASA production wells, Wyeth production well AWPI-2, Baxter Production Well, and TAPI production wells SKF-720, SKF-721, and SKF-722 were not sampled during this event.

2.2.3 Purge Water Disposal

Purge water from groundwater monitor wells sampled from November 8 to December 5, 2017 was temporarily containerized in a tanker truck located at the Core Facility. After the GWETS power was reestablished on December 5, 2017, purge water was containerized within a 400-gallon tank. Purge water was transferred to the groundwater treatment system secondary containment sump, pumped into the air stripper where it was treated, and then discharged into the Phillips Ditch.

2.3 Laboratory Analysis

Groundwater samples collected at 68 groundwater monitor wells and five groundwater extraction wells were analyzed for CVOCs and haloethers. Additionally, 12 of the 68 groundwater monitor wells were also sampled following the low flow procedure. These samples were analyzed for CVOCs and haloethers. Groundwater samples collected at one groundwater monitor well (FMW-6-90) was analyzed for chloride. Pace Analytical Services, Inc., St. Rose, Louisiana (Pace) conducted the sample analyses in accordance with the following USEPA analytical methods:

- CVOCs and haloethers - Method 5030B/8260.
- Chloride - Method 300.0.

2.4 Quality Assurance and Quality Control

Quality assurance samples included four blind duplicate samples, eight matrix spike/matrix spike duplicate (MS/MSD) samples (for CVOCs and haloethers), 33 field blank (FB) samples, 33 equipment blank (EB) samples and 13 trip blank (TB) samples. One FB and one EB were collected each day that groundwater was sampled. One TB for CVOCs' and haloethers' analysis accompanied each shipment of CVOCs and haloether sample vials. Groundwater samples were packed with ice in coolers under full chain-of-custody procedures prior to shipment to the laboratory.

3 RESULTS

3.1 Groundwater Elevation

Depth to groundwater measurements recorded at 75 groundwater monitor and extraction wells on November 6 and November 8, 2017 are listed in **Table 1**. Groundwater potentiometric surface contours are illustrated on **Figure 5**. As described in Section 1.2.3, groundwater elevations represent non-pumping conditions, since the GWETS was out of service during depth to groundwater measurements. The highest groundwater elevation reading measured at each groundwater monitor cluster well location was used for contouring on **Figure 5**. Groundwater elevations recorded at the groundwater extraction wells were used to create groundwater contours. Groundwater elevation measurements indicate that the overall direction of groundwater flow is south-southwest toward the Caribbean Sea; however, groundwater flow at the Wyeth and Baxter properties has a general southwesterly component. These patterns are consistent with findings of previous groundwater monitoring events.

3.2 Field Parameter Measurements

Groundwater monitoring field parameters measured DO, ORP, pH, specific conductivity, temperature, TDS, and turbidity during the second semi-annual monitoring event of 2017 (2SAR2017) are presented in **Table 3**.

Groundwater pH at the Site is near neutral ranging from 6.09 (MW-1A-2) to 7.49 (MW-1A-1BR) with no obvious differences spatially or between hydrostratigraphic zones. Groundwater temperatures at the Site are typical (between 27.23-30.99 degrees Celsius [°C]) given the Site location and climate. Specific conductivities recorded at the Site were generally less than 1 millisiemens per centimeter (mS/cm) except for FMW-1-20, MW-1C-1BR-A, MW-4B-1BR, and USGS-TW-A2 where specific conductivity ranged from 1.040 mS/cm (FMW-1-20) to 2.943 mS/cm (MW-1C-1BR-A). Groundwater monitor wells MW-1C-1BR-A and MW-4B-1BR are located in the lower HSU; groundwater monitor wells FMW-1-20 and USGS-TW-A2 are located in the upper HSU.

3.3 Groundwater Laboratory Analyses

Volatile organic compounds (VOCs; including CVOCs and haloethers) and chloride laboratory analytical results are discussed in this section. Groundwater laboratory analytical results are presented in **Table 4** through **Table 8** and **Table B-1**. Laboratory analytical data packages are included in **Appendix A**.

3.3.1 VOCs

Groundwater laboratory analytical results for the detected VOCs are presented in **Table 4**. Groundwater monitor wells sampling during non-pumping conditions are identified on Table 4. The GWETS was shut down September 5 through December 5, 2017 due to equipment issues and other regional issues associated with Hurricanes Irma and Maria. Groundwater samples were collected between November 8, 2017 through January 16, 2018. Groundwater laboratory analytical results for all VOCs are presented in **Table B-1** (**Appendix B**). A discussion of results for each group of VOCs is presented below.

3.3.1.1 CVOCs (Three Well Casing Volume Purging and Sampling Technique)

Tetrachloroethene (PCE) was the only chlorinated organic constituent reported at the Site at concentrations exceeding the Groundwater Cleanup Criteria (GWCC) during this monitoring event.

PCE was detected above the GWCC (5 micrograms per liter [µg/L]) in samples collected from eight groundwater monitor wells (AWPI-MW-2, 5.8 µg/L; FMW-2-90, 9.4 µg/L; FMW-3-90, 7.5 µg/L; FMW-5-90, 5.1 µg/L; MW-1B-1BR, 33.7 µg/L; MW-1C-1BR-A, 10.7 µg/L; MW-3A-2, 14.8 µg/L; and PCMW-2, 10.5 µg/L), and one groundwater extraction well (RW-5, 16.8 µg/L). **Figures 6**, **7,** and **8** illustrate PCE groundwater concentrations in the upper, middle, and lower HSUs, respectively. Isopleth contours are included to illustrate PCE groundwater concentrations exceeding the GWCC. **Figures 9**, **10,** and **11** illustrate a 3-dimensional view of PCE groundwater concentrations and plume(s) underlying the Site.

To evaluate possible PCE rebound associated with the cessation of the GWETS in May 2013, a comparison was conducted of the areal extent of the PCE plume(s) in August-September 2015 (2SAR2015), April-May 2016 (1SAR2016), October-December 2016 (2SAR2016), and May-June 2017 (1SAR2017). One groundwater monitoring event (2SAR2015) represented “non-pumping” groundwater conditions. Groundwater monitoring events 1SAR2016, 2SAR2016, and 1SAR2017 represent “pumping” groundwater conditions. **Figures C-1**, **C-2**, **C-3**, and **C-4**, illustrating the PCE plume(s) in the three combined HSUs during these four groundwater monitoring events, are provided in **Appendix C**. The groundwater monitor cluster well PCE concentration noted on each figure, at each cluster well location, represents the highest PCE concentration detected within the cluster wells. Overall, the areal extent of the PCE plume has basically remained unchanged; during this monitoring event, PCE was detected in bedrock above the GWCC (5 µg/L) at two groundwater monitoring wells (MW-1B-1BR, 33.7 µg/L and MW-1C-1BR-A, 10.7 µg/L). The highest PCE concentration was reported at groundwater monitor well MW-1B-1BR (33.7 µg/L).

During this monitoring event, PCE degradation products (trichloroethene [TCE], cis-1,2-dichloroethene [cis-1,2-DCE], and/or vinyl chloride [VC]) were identified in the following seven groundwater monitor wells:

- MW-15-90 – (TCE, 1.4 µg/L; cis-1,2-DCE, 1.0 µg/L).
- MW-1B-1BR – (TCE, 2.6 µg/L; cis-1,2-DCE, 3.0 µg/L).
- MW-1C-1BR-A – (cis-1,2-DCE, 1.8 µg/L).
- MW-3A-2 – (TCE, 2.2 µg/L; cis-1,2-DCE, 34.7 µg/L; VC, 2.6 µg/L).
- PCMW-1 – (cis-1,2-DCE, 4.2 µg/L).
- PCMW-2 – (TCE, 1.5 µg/L, cis-1,2-DCE, 2.0 µg/L).
- USGS-TW-A1 – (TCE, 1.1 µg/L)

In addition, TCE and/or cis-1,2-DCE were identified in one groundwater extraction wells:

- RW-5 – (TCE, 1.0 µg/L; cis-1,2-DCE, 1.4 µg/L).

Figures 12, **13,** and **14** illustrate TCE groundwater concentrations in the upper, middle, and lower HSUs, respectively. **Figures 15**, **16,** and **17** illustrate cis-1,2-DCE groundwater concentrations in the upper, middle, and lower HSUs, respectively.

3.3.1.2 CVOCs (Low Flow Purging and Sampling Technique)

As described in Section 2.2.1, 12 of the 73 groundwater monitor wells were purged and sampled following a low flow purging and sampling technique (i.e., utilizing a bladder pump). Groundwater laboratory analytical results of the low flow samples are presented in **Table 4** and labeled with a BP (bladder pump) identifier (e.g., MW-1D-3-BP).

PCE was detected at or above the GWCC (5 µg/L) in seven (low flow) groundwater samples collected from seven monitor wells (FMW-2-90-BP, 11.3 µg/L; FMW-3-90-BP, 24.8 µg/L; FMW-5-90-BP, 5.0 µg/L; MW-1B-1BR-BP, 53.4J µg/L; MW-1C-1BR-A-BP, 16.6 µg/L; MW-4B-3-BP, 12.6 µg/L; and, PCMW-2-BP, 21.2 µg/L).

During this monitoring event, PCE degradation products (TCE and/or cis-1,2-DCE) were identified in the following six (low-flow) groundwater samples from six monitor wells:

- FMW-3-90-BP – (cis-1,2-DCE, 1.5 µg/L).
- FMW-5-90-BP – (cis-1,2-DCE, 1.1 µg/L).
- MW-1B-1BR-BP – (TCE, 3.5 µg/L; cis-1,2-DCE, 4.7 µg/L).
- MW-1C-1BR-A-BP – (cis-1,2-DCE, 3.2 µg/L).
- MW-4B-3-BP – (cis-1,2-DCE, 1.2 µg/L).
- PCMW-2 -BP – (TCE, 2.5 µg/L, cis-1,2-DCE, 2.2 µg/L).

3.3.1.3 Haloethers (Three Well Casing Volume Purging and Sampling Technique)

Haloethers are anesthetics and intermediate compounds used in the manufacture of anesthetics. Final product haloethers include isoflurane, enflurane and methoxyflurane. Intermediate compounds include: haloether compounds 229, 406, 469, 485, 508, 520, 528, 326, 346, 372, 421, 427, 428, 440 and 470; halomar; compound mono; compound di; and, compound di-1,2. Physico-chemical data for haloethers presented in Safety Data Sheets and other published information characterize the compounds as volatile and soluble in water.

Groundwater samples were analyzed for isoflurane, enflurane, methoxyflurane, halomar and intermediate haloether compounds 229, 406, 421, 427, 428, 508 and 528.

The current default GWCC guideline values of 50 µg/L for an individual VOC and 100 µg/L for a class of VOCs (e.g., total haloethers) were assigned for haloethers in the absence of a risk-based or constituent-specific standard. The Fibers Group developed risk-based screening concentrations for haloethers and submitted a report to the USEPA in August 2004, which was revised in 2008.

Haloethers were detected above the default GWCC in groundwater samples collected at nine groundwater monitor wells and two groundwater extraction wells. Laboratory analytical results for haloethers are presented in **Table 4**. The most detected haloether compounds above the default GWCC are isoflurane (eight groundwater monitor wells and one groundwater extraction well) and haloether compound 508 (two groundwater monitor wells and one groundwater extraction well). One of these results were qualified “D” during data validation because the laboratory was required to dilute the sample for analysis. Isoflurane concentrations range from not detected at the laboratory reporting limit (various

wells) to 198 µg/L (FMW-4-90). Haloether compound 508 concentrations range from not detected at the laboratory reporting limit (various wells) to 98.1 µg/L (FMW-2-90).

Figures 18, **19**, and **20** illustrate isoflurane groundwater concentrations in the upper, middle, and lower HSUs, respectively. Isopleth contours are included to illustrate isoflurane groundwater concentrations exceeding the GWCC (50 µg/L). **Figures 21**, **22,** and **23** illustrate a 3-dimensional view of isoflurane groundwater concentrations and plume(s) underlying the Site.

Figures 24, **25**, and **26** illustrate haloether 508 groundwater concentrations in the upper, middle, and lower HSUs, respectively. Isopleth contours are included to illustrate haloether 508 groundwater concentrations exceeding the GWCC (50 µg/L). **Figures 27**, **28**, and **29** illustrate a 3-dimensional view of haloether 508 groundwater concentrations and plume(s) underlying the Site.

Figures 30, **31**, and **32** illustrate total haloethers groundwater concentrations in the upper, middle, and lower HSUs, respectively. Isopleth contours are included to illustrate total haloethers groundwater concentrations exceeding the GWCC (100 µg/L). **Figures 33**, **34**, and **35** illustrate a 3-dimensional view of total haloethers groundwater concentrations and plume(s) underlying the Site.

To evaluate changes in isoflurane concentrations associated with the cessation of the GWETS in May 2013, a comparison was conducted of the areal extent of the isoflurane plume(s) in 2SAR2015, 1SAR2016, 2SAR2016, and 1SAR2017. **Figures C-5**, **C-6**, **C-7**, and **C-8**, illustrating the isoflurane plume(s) in the three combined HSUs during these four groundwater monitoring events, are provided in **Appendix C**. The groundwater monitor cluster well isoflurane concentration noted on each figure, at each cluster well location, represents the highest isoflurane concentration detected within the cluster wells. Overall, the areal extent of the isoflurane plume has remained relatively consistent.

To evaluate changes in haloether 508 concentrations associated with the cessation of the GWETS in May 2013, a comparison was conducted of the areal extent of the haloether 508 plume(s) in 2SAR2015, 1SAR2016, 2SAR2016, and 1SAR2017. **Figures C-9**, **C-10**, **C-11**, and **C-12**, illustrating the haloether 508 plume(s) in the three combined HSUs during these four groundwater monitoring events, are provided in **Appendix C**. The groundwater monitor cluster well haloether 508 concentration noted on each figure, at each cluster well location, represents the highest haloether 508 concentration detected within the cluster wells. Overall, the areal extent of the haloether 508 plume has remained relatively consistent.

To evaluate changes in total haloethers concentrations associated with the cessation of the GWETS in May 2013, a comparison was conducted of the areal extent of the total haloethers plume(s) in 2SAR2015, 1SAR2016, 2SAR2016, and 1SAR2017. **Figures C-13**, **C-14**, **C-15**, and **C-16**, illustrating the total haloethers plume(s) in the three combined HSUs during these four groundwater monitoring events, are provided in **Appendix C**. The groundwater monitor cluster well total haloethers concentration noted on each figure, at each cluster well location, represents the highest total haloethers concentration detected within the cluster wells. Overall, the areal extent of the total haloethers plume has remained relatively consistent.

3.3.1.4 Haloethers (Low Flow Purging and Sampling Technique)

Haloethers were detected above the default GWCC in eight (low flow) groundwater samples collected from eight monitor wells. Laboratory analytical results for haloethers are presented in **Table 4**. The most detected haloether compounds above the default GWCC are isoflurane (four groundwater monitor wells)

and haloether compound 508 (seven groundwater monitor wells). One of these results were qualified “D” during data validation because the laboratory was required to dilute the sample for analysis. Isoflurane concentrations range from not detected at the laboratory reporting limit (various wells) to 147 µg/L (MW-2C-3-BP). Haloether compound 508 concentrations range from not detected at the laboratory reporting limit (various wells) to 146 µg/L (MW-4B-1BR-BP).

3.3.1.5 Other VOCs

No other VOCs were observed above the GWCC in groundwater samples collected from the groundwater monitor and groundwater extraction wells during this monitoring event.

3.3.2 Chloride

A groundwater sample collected at groundwater monitor well FMW-6-90 was analyzed for chloride in accordance with USEPA Method 300.0. Chloride was detected at 73.2 mg/L in sample FMW-6-90. The USEPA Secondary (aesthetic) Drinking Water Standard for chloride is 250 mg/L. Chloride analytical results are presented in **Table 5**. A groundwater sample was not collected at TAPI production well SKF-722 during this monitoring event (no site access). Based on the laboratory analytical result, it appears that saltwater intrusion is not occurring at the Site groundwater monitor wells.

3.3.3 Historical Groundwater Concentrations and Trends

Table 6 depicts PCE concentrations at 22 groundwater monitor wells, one groundwater production well and five groundwater extraction wells dating back to 1987. The GWETS operational periods (GWETS commenced operation May 1999; RW-5 commenced pumping December 2004; GWETS placed out of service May 2013; and, GWETS commenced operation [RW-2, RW-4, RW-5 pumping] September 2015) are presented on **Table 6**. As shown, PCE concentrations have been detected above the GWCC (5 µg/L) in at least one or more of the **Table 6**-listed groundwater wells since 1987.

Table 7 depicts haloether 508 concentrations at 15 groundwater monitor wells and four groundwater extraction wells dating back to 1993. The GWETS operational periods (GWETS commenced operation May 1999; RW-5 commenced pumping December 2004; GWETS placed out of service May 2013; and, GWETS commenced operation (RW-2, RW-4, RW-5 pumping) September 2015) are presented on **Table 7**. As shown, haloether 508 concentrations have been detected above the GWCC (50 µg/L) in at least one or more of the **Table 7**-listed groundwater monitor wells since 1993.

Table 8 depicts isoflurane concentrations at 19 groundwater monitor wells and three groundwater extraction wells dating back to 1990. The GWETS operational periods (GWETS commenced operation May 1999; RW-5 commenced pumping December 2004; GWETS placed out of service May 2013; and, GWETS commenced operation (RW-2, RW-4, RW-5 pumping) September 2015) are presented on **Table 8**. As shown, isoflurane concentrations have been detected above the GWCC (50 µg/L) in at least one or more of the **Table 8**-listed groundwater monitor wells since 1990.

Time trend graphs for PCE and haloethers (haloether compound 508 and isoflurane) at 16 groundwater monitor wells (MW-11-20, MW-22-90, MW-4-90, PCMW-2, PCMW-1, PCMW-5, MW-5-90, FMW-5-90, FMW-4-90, MW-1, MW-2, FMW-3-90, USGS-TW-A1, FMW-2-90, FMW-1-90 and FMW-6-90) are provided in **Appendix D**. As shown on the time trend graphs, PCE and haloethers concentrations have

generally decreased over time. Groundwater concentrations appear to have stabilized by operation of the GWETS commencing September 2015.

3.4 QA/QC

Arcadis performed laboratory data validation of the groundwater laboratory analytical results. Results are provided in **Appendix E** and summarized in the following sections.

3.4.1 Blank Samples

Quality assurance blanks (i.e., method, trip, equipment, or field) were prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activities. Results of quality assurance sampling are presented in **Table 4**. Acetone was detected in 18 of the 33 FB samples. No additional detectable VOC concentrations were reported for the FB samples. Acetone was detected in two of the 13 TB samples. No additional detectable VOC concentrations were reported for the TB samples. Acetone was detected in 13 of the 33 EB samples. No additional detectable VOC concentrations were reported for the EB samples.

3.4.2 Duplicate Samples

Four duplicate samples were collected during this groundwater monitoring event GW-DUP001 (PCMW-2), GW-DUP002 (MW-22-90), GWDUP-003 (USGS-TW-A1), and GWDUP-004 (RW-3). The calculated relative percent difference (RPD) between the parent samples and corresponding blind duplicate samples were generally acceptable.

3.4.3 Data Validation

Arcadis performed data validation of the analytical results received by Pace. The overall data quality was acceptable. Results are summarized in the data validation reports included in **Appendix E**.

4 CONCLUSIONS

Arcadis personnel sampled groundwater monitor wells following the standard purging procedures in the USEPA Groundwater Sampling Standard Operating Procedure #2007. Twelve of the 68 groundwater monitor wells were also sampled following the USEPA 1998, Low Flow Purging and Sampling Procedures for Collection of Groundwater Samples from Monitoring Wells. The data indicates:

- PCE concentrations in the majority of the groundwater monitor wells sampled using the three well casing volume purging and sampling technique, and groundwater extraction wells sampled exhibit relatively stable concentrations, and many are below the GWCC (5 µg/L). The highest PCE concentration was reported at groundwater monitor well MW-1B-1BR (33.7 µg/L).
- Low concentrations of TCE and/or cis-1,2-DCE, breakdown daughter products of reductive dechlorination of PCE, were detected at seven groundwater monitor wells sampled using the three well casing volume purging and sampling technique, and one groundwater extraction well (RW-5). VC was detected at one groundwater monitor well (MW-3A-2) during this 2SAR2017 monitoring event, which may be due to more aerobic groundwater conditions, resulting in decreased generation of VC and faster degradation where it is present in aerobic groundwater.
- Aerobic conditions at the Site suggest an environment conducive to aerobic biodegradation of the daughter products of PCE reductive dechlorination. These processes do not produce readily detectable intermediaries and the primary line of evidence for the occurrence of aerobic and abiotic degradation of CVOCs is stable to decreasing concentrations. Rapid degradation of cis-1,2-DCE and VC could explain the lack of these compounds at the Site if they are being produced from anaerobic biodegradation of PCE and TCE in discrete areas at the Site.
- PCE detected in five groundwater monitor wells (MW-1A-3-BP, MW-1B-4-BP, MW-1D-3-BP, MW-2C-3-BP, and MW-4B-1BR-BP) sampled using the low flow purging and sampling technique were below the GWCC (5 µg/L) with no significant difference with the PCE concentrations detected using the three well casing volume purging and sampling technique in the same wells.
- PCE detected in seven groundwater monitor wells (FMW-2-90-BP, FMW-3-90-BP, FMW-5-90-BP, MW-1B-1BR-BP, MW-1C-1BR-A-BP, MW-4B-3-BP, and PCMW-2-BP) sampled using the low flow purging and sampling technique were above the GWCC (5 µg/L). The groundwater samples exhibited a general increase in PCE concentrations compared to the results obtained using the three well casing volume purging and sampling technique in the same wells except for groundwater sample FMW-5-90-BP which exhibited a PCE concentration similar to groundwater sample FMW-5-90 (5.0 µg/L and 5.1 µg/L, respectively).
- Isoflurane and haloether compound 508 were the most prevalent haloether compounds detected during this 2SAR2017 monitoring event. Haloether concentrations in the majority of the groundwater monitor wells sampled using the three well casing volume purging and sampling technique, and extraction wells exhibit relatively stable concentrations, and many are below the GWCC (50 µg/L; individual VOC, and 100 µg/L; total haloethers). The highest total haloethers concentration was reported at groundwater monitor well MW-2C-2 (total haloethers; 261D µg/L).

- Total haloethers detected in five groundwater monitor wells (MW-1A-3-BP, MW-1B-1BR-BP, MW-1B-4-BP, MW-1C-1BR-A-BP, and PCMW-2-BP) sampled using the low flow purging and sampling technique were below the GWCC (100 µg/L) with no significant difference with the total haloethers concentrations detected using the three well casing volume purging and sampling technique in the same wells.
- Total haloethers detected in seven groundwater monitor wells (FMW-2-90-BP, FMW-3-90-BP, FMW-5-90-BP, MW-1D-3-BP, MW-2C-3-BP, MW-4B-1BR-BP, and MW-4B-3-BP) sampled using the low flow purging and sampling technique were above the GWCC (100 µg/L). The groundwater samples exhibited a general increase in total haloethers concentrations compared to the results obtained using the three well casing volume purging and sampling technique in the same wells.

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TABLES

Table 1
Groundwater Elevation Measurements
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Well ID	Top of Inner Casing (TOIC) Elevation (ft amsl)	Depth to Water [1] (ft below TOIC)	Groundwater Elevation [1] (ft above amsl)
BAXTER PRODUCTION WELL	NA	NM	NM
AWPI-2	62.56	NM	--
ES-21	60.34	12.11	48.23
AWPI-MW-1	61.22	15.30	45.92
AWPI-MW-2	60.07	14.80	45.27
ES-19	57.43	12.35	45.08
MW-1D-1BR	48.42	NM	--
MW-1D-2	48.32	NM	--
MW-1D-3	48.70	NM	--
MW-1D-4	48.61	NM	--
MW-15-90	48.68	7.96	40.72
MW-10-90	Well Obstructed		
MW-11-20	48.25	7.86	40.39
MW-13-20	Well Destroyed		
MW-17-90	48.37	9.00	39.37
MW-18-20 [2]	47.29	9.40	37.89
MW-19-90 [2]	47.60	9.65	37.95
MW-22-90	49.43	11.60	37.83
MW-21-20	49.44	10.05	39.39
MW-4-90	47.23	9.95	37.28
MW-3-20	47.86	9.97	37.89
MW-7-20	45.20	8.81	36.39
MW-6-90	45.26	8.33	36.93
PCMW-4	57.85	NM	NM
MW-9-90 [2]	47.09	6.65	40.44
MW-1B-1BR	54.30	14.92	39.38
MW-1B-2	54.15	13.53	40.62
MW-1B-3	53.84	11.81	42.03
MW-1B-4	54.24	11.60	42.64
PCMW-2	53.50	10.11	43.39
MW-1A-1BR	44.23	8.50	35.73
MW-1A-2	44.27	8.73	35.54
MW-1A-3	44.13	8.50	35.63
MW-1A-4	44.48	8.90	35.58
PRASA-2	NA	NM	NM
PCMW-1	48.72	8.00	40.72
AN-1	43.70	7.88	35.82
OW-1	42.24	7.50	34.74
RW-5	42.82	7.83	34.99
PCMW-5	43.88	8.18	35.70
MW-5-90	38.93	6.26	32.67
AN-2	39.25	5.50	33.75
PRASA-3	NA	NM	NM
PRASA-4	NA	NM	NM
MW-3A-1BR	46.95	12.43	34.52
MW-3A-2	46.98	12.57	34.41
MW-3A-3	46.76	10.63	36.13
MW-3A-4	46.77	11.30	35.47
RW-1	44.69	10.70	33.99
FMW-5-90	41.21	9.98	31.23
PRASA-5	NA	NM	NM
RW-2	38.57	8.09	30.48
MW-1C-1BR-A	43.10	13.13	29.97
MW-1C-2	42.89	11.51	31.38
MW-1C-3	43.15	11.53	31.62
MW-1C-4	42.99	11.79	31.20

Table 1
Groundwater Elevation Measurements
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Well ID	Top of Inner Casing (TOIC) Elevation (ft amsl)	Depth to Water [1] (ft below TOIC)	Groundwater Elevation [1] (ft above amsl)
FMW-4-20	35.91	7.22	28.69
FMW-4-90	35.07	8.24	26.83
MW-2C-1BR	34.50	9.85	24.65
MW-2C-2	34.63	10.00	24.63
MW-2C-3	33.75	8.41	25.34
MW-2C-4	34.37	8.52	25.85
MW-2C-5	34.14	8.50	25.64
USGS-TW-C2	49.69	20.31	29.38
USGS-TW-C1	49.59	19.94	29.65
MW-1	45.74	15.60	30.14
MW-4B-1BR	47.31	18.94	28.37
MW-4B-2	46.96	18.67	28.29
MW-4B-3	46.62	18.23	28.39
MW-4B-4	47.25	18.63	28.62
MW-2	39.21	11.91	27.30
RW-3	40.77	11.93	28.84
CORE-PROD-1A	NA	NM	NM
MW-4C-1BR	39.29	15.16	24.13
MW-4C-2	39.42	15.39	24.03
MW-4C-3	39.25	15.10	24.15
MW-4C-4	38.95	14.47	24.48
FMW-3-90	39.08	14.79	24.29
USGS-TW-A2	37.20	15.01	22.19
USGS-TW-A1	36.59	14.22	22.37
RW-4	35.40	13.73	21.67
FMW-2-90	36.85	13.68	23.17
CORE-PROD-7	43.01	NM	NM
MW-4D-1BR	33.94	11.33	22.61
MW-4D-2	34.14	11.64	22.50
MW-4D-3	34.03	11.62	22.41
MW-4D-4	33.78	11.97	21.81
CORE-PROD-2	39.53	NM	NM
CORE-DOM-2A	43.33	NM	NM
CORE-PROD-4	32.79	NM	NM
CORE-PROD-3	36.60	NM	NM
CORE-PROD-5	30.83	NM	NM
FMW-1-20	25.79	7.70	18.09
FMW-1-90	25.06	7.52	17.54
FMW-6-90	23.05	6.49	16.56
SKF-721	17.95	NM	NM
CORE-PROD-6	NA	NM	NM
SKF-720	NA	NM	NM
SKF-722	14.70	NM	NM

Notes
ft amsl: feet above mean sea level
[1]: depth to groundwater measured 11/06/2017 and 11/08/2017.
[2]: resurveyed by Caribbean Aerial Surveys, Inc., 10/26/13; Horizontal: NAD83; Vertical: NGVD29.
NA: not available.
NM: not measured.

Table 2
Groundwater Sampling and Analysis Summary
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Well ID	Well Casing Diameter (inches)	Well Depth (ft below TOIC)	Water Level Measured	Sample Method	Laboratory Analysis	
					Volatile Organic Compounds (USEPA Method 8260B)	Chloride (USEPA Method 300.0)
Groundwater Monitor Wells						
PCMW-1	2	36.9	X	Teflon Bailer	X	
PCMW-2	2	45.3	X	Teflon Bailer	X	
PCMW-2-BP	2	45.3	X	Bladder Pump	X	
PCMW-4	2	NA	NM	NS		
PCMW-5	2	44.9	X	Teflon Bailer	X	
AWPI-MW-1	2	30.2	X	Teflon Bailer	X	
AWPI-MW-2	2	27.2	X	Teflon Bailer	X	
ES-19	2	41.7	X	Teflon Bailer	X	
ES-21	6	39.0	X	Teflon Bailer	X	
MW-3-20	4	17.7	X	NS		
MW-4-90	4	62.6	X	Teflon Bailer	X	
MW-5-90	4	58.7	X	Teflon Bailer	X	
MW-6-90	4	76.7	X	Teflon Bailer	X	
MW-7-20	4	20.1	X	NS		
MW-9-90	4	43.3	X	Teflon Bailer	X	
MW-10-90	4	Well Obstructed				
MW-11-20	4	20.0	X	Teflon Bailer	X	
MW-13-20	4	Well Destroyed				
MW-15-90	4	83.6	X	Teflon Bailer	X	
MW-17-90	4	69.7	X	Teflon Bailer	X	
MW-18-20	4	20.1	X	NS		
MW-19-90	4	76.4	X	Teflon Bailer	X	
MW-21-20	4	19.9	X	NS		
MW-22-90	4	86.9	X	Teflon Bailer	X	
AN-1	4	33.9	X	Teflon Bailer	X	
AN-2	4	25.2	X	Teflon Bailer	X	
FMW-1-20	4	27.5	X	Teflon Bailer	X	
FMW-1-90	4	95.3	X	Teflon Bailer	X	
FMW-2-90	4	89.9	X	Teflon Bailer	X	
FMW-2-90-BP	4	89.9	X	Bladder Pump	X	
FMW-3-90	4	86.2	X	Teflon Bailer	X	
FMW-3-90-BP	4	86.2	X	Bladder Pump	X	
FMW-4-20	4	27.1	X	Teflon Bailer	X	
FMW-4-90	4	82.5	X	Teflon Bailer	X	
FMW-5-90	4	86.0	X	Teflon Bailer	X	
FMW-5-90-BP	4	86.0	X	Bladder Pump	X	
FMW-6-90	4	74.0	X	Teflon Bailer	X	X
MW-1	2	49.3	X	Teflon Bailer	X	
MW-2	2	47.4	X	Teflon Bailer	X	
OW-1	2	74.3	X	Teflon Bailer	X	
MW-1A-1BR	2	144.7	X	Teflon Bailer	X	
MW-1A-2	2	69.4	X	Teflon Bailer	X	
MW-1A-3	2	54.5	X	Teflon Bailer	X	
MW-1A-3-BP	2	54.5	X	Bladder Pump	X	
MW-1A-4	2	40.8	X	Teflon Bailer	X	
MW-1B-1BR	2	123.2	X	Teflon Bailer	X	
MW-1B-1BR-BP	2	123.2	X	Bladder Pump	X	
MW-1B-2	2	60.5	X	Teflon Bailer	X	
MW-1B-3	2	44.7	X	Teflon Bailer	X	
MW-1B-4	2	34.2	X	Teflon Bailer	X	
MW-1B-4-BP	2	34.2	X	Bladder Pump	X	

Table 2
Groundwater Sampling and Analysis Summary
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Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Well ID	Well Casing Diameter (inches)	Well Depth (ft below TOIC)	Water Level Measured	Sample Method	Laboratory Analysis	
					Volatile Organic Compounds (USEPA Method 8260B)	Chloride (USEPA Method 300.0)
Groundwater Monitor Wells						
MW-1C-1BR-A	2	147.8	X	Teflon Bailer	X	
MW-1C-1BR-A-BP	2	147.8	X	Bladder Pump	X	
MW-1C-2	2	67.8	X	Teflon Bailer	X	
MW-1C-3	2	45.6	X	Teflon Bailer	X	
MW-1C-4	2	37.4	X	Teflon Bailer	X	
MW-1D-1BR	2	145.1	X	Teflon Bailer	X	
MW-1D-2	2	70.4	X	Teflon Bailer	X	
MW-1D-3	2	54.7	X	Teflon Bailer	X	
MW-1D-3-BP	2	54.7	X	Bladder Pump	X	
MW-1D-4	2	34.7	X	Teflon Bailer	X	
MW-2C-1BR	2	153.2	X	Teflon Bailer	X	
MW-2C-2	2	77.7	X	Teflon Bailer	X	
MW-2C-3	2	55.0	X	Teflon Bailer	X	
MW-2C-3-BP	2	55.0	X	Bladder Pump	X	
MW-2C-4	2	36.3	X	Teflon Bailer	X	
MW-2C-5	2	23.0	X	Teflon Bailer	X	
MW-3A-1BR	2	162.9	X	Teflon Bailer	X	
MW-3A-2	2	72.4	X	Teflon Bailer	X	
MW-3A-3	2	55.9	X	Teflon Bailer	X	
MW-3A-4	2	37.4	X	Teflon Bailer	X	
MW-4B-1BR	2	163.7	X	Teflon Bailer	X	
MW-4B-1BR-BP	2	163.7	X	Bladder Pump	X	
MW-4B-2	2	82.6	X	Teflon Bailer	X	
MW-4B-3	2	60.2	X	Teflon Bailer	X	
MW-4B-3-BP	2	60.2	X	Bladder Pump	X	
MW-4B-4	2	47.2	X	Teflon Bailer	X	
MW-4C-1BR	2	153.1	X	Teflon Bailer	X	
MW-4C-2	2	83.2	X	Teflon Bailer	X	
MW-4C-3	2	59.2	X	Teflon Bailer	X	
MW-4C-4	2	44.9	X	Teflon Bailer	X	
MW-4D-1BR	2	149.8	X	Teflon Bailer	X	
MW-4D-2	2	88.1	X	Teflon Bailer	X	
MW-4D-3	2	72.6	X	Teflon Bailer	X	
MW-4D-4	2	51.5	X	Teflon Bailer	X	
USGS-TW-C1	4	41.3	X	NS		
USGS-TW-C2	4	54.5	X	NS		
USGS-TW-A1	4	101.3	X	Teflon Bailer	X	
USGS-TW-A2	4	29.0	X	Teflon Bailer	X	
Groundwater Extraction Wells						
RW-1	8	82.0	X	Peristaltic Pump	X	
RW-2	8	82.0	NM	Sampling Port	X	
RW-3	8	83.0	X	Peristaltic Pump	X	
RW-4	8	85.0	NM	Sampling Port	X	
RW-5	8	90.0	NM	Sampling Port	X	
Groundwater Production Wells						
PRASA 2	12	NA	NM	NS		
PRASA 3	12	NA	NM	NS		
PRASA 4	12	NA	NM	NS		
PRASA 5	16	NA	NM	NS		
AWPI-2	16	112.0	NM	NS		
BAXTER PRODUCTION WELL	NA	NA	NM	NS		

Table 2
Groundwater Sampling and Analysis Summary
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
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Well ID	Well Casing Diameter (inches)	Well Depth (ft below TOIC)	Water Level Measured	Sample Method	Laboratory Analysis	
					Volatile Organic Compounds (USEPA Method 8260B)	Chloride (USEPA Method 300.0)
Groundwater Production Wells						
CORE PROD 1A	NA	NA	NM	NS		
CORE PROD DOM-2A	NA	NA	NM	NS		
CORE PROD 2	NA	NA	NM	NS		
CORE PROD 3	NA	NA	NM	NS		
CORE PROD 4	NA	NA	NM	NS		
CORE PROD 5	NA	NA	NM	NS		
CORE PROD 6	NA	NA	NM	NS		
CORE PROD 7	NA	NA	NM	NS		
SKF-720	NA	NA	NM	NS		
SKF-721	NA	NA	NM	NS		
SKF-722	8	100.0	NM	NS		

Notes
Wells with spigots were purged for approximately 15 minutes and water quality field parameters taken prior to sampling.
USEPA: United States Environmental Protection Agency.
ft: feet.
TOIC: top of inner casing.
X: indicates groundwater measurement/sample collected at the associated Well ID for the respective parameter.
Teflon is a registered name.
NA: not available.
NM: not measured.
NS: not sampled.
Well depths for groundwater extraction and production wells based on original construction log, feet below ground surface.

Table 3
Groundwater Monitoring Field Parameters
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Well ID	Date Groundwater Sample Collected	Groundwater Field Parameters						
		Dissolved Oxygen (DO; mg/L)	Oxidation-Reduction Potential (ORP; mV)	pH (S.U.)	Specific Conductivity (mS/cm)	Temperature (°C)	Total Dissolved Solids (TDS; g/L)	Turbidity (NTU)
BAXTER PRODUCTION WELL	NS	NS	NS	NS	NS	NS	NS	NS
AWPI-2	NS	NS	NS	NS	NS	NS	NS	NS
ES-21	11/29/2017	0.90	(78.1)	6.97	0.481	29.34	0.314	88.2
AWPI-MW-1	1/11/2018	0.83	105.0	6.51	0.477	28.68	0.310	8.3
AWPI-MW-2	1/11/2018	3.80	118.2	6.46	0.489	28.57	0.318	10.2
FMW-5-90	11/15/2017	3.39	57.2	6.92	0.467	28.54	0.303	0.0
FMW-5-90-BP	11/8/2017	2.92	103.7	6.89	0.475	28.31	0.309	22.5
ES-19	1/11/2018	0.54	52.9	6.81	0.467	29.12	0.303	54.8
MW-1D-1BR	12/7/2017	0.77	(46.0)	7.08	0.509	28.32	0.331	0.0
MW-1D-2	12/7/2017	3.11	18.6	6.92	0.478	28.82	0.311	1.2
MW-1D-3	12/6/2017	4.62	162.8	6.78	0.490	29.14	0.319	41.4
MW-1D-3-BP	12/4/2017	4.20	64.4	6.83	0.476	30.99	0.309	57.1
MW-1D-4	12/7/2017	5.07	94.1	6.88	0.711	30.08	0.462	16.4
MW-15-90	12/13/2017	2.03	93.7	6.90	0.493	28.67	0.321	0.2
MW-11-20	12/12/2017	1.63	39.7	6.87	0.756	28.90	0.491	1.7
MW-17-90	12/13/2017	5.63	118.7	6.72	0.629	29.96	0.408	0.0
MW-19-90	12/12/2017	4.59	NR	6.75	0.547	29.36	0.354	0.0
MW-22-90	12/19/2017	5.42	195.3	6.68	0.540	29.32	0.351	300.1
MW-21-20	NS	NS	NS	NS	NS	NS	NS	NS
MW-4-90	12/20/2017	4.30	161.1	6.80	0.560	29.38	0.364	202.3
MW-3-20	NS	NS	NS	NS	NS	NS	NS	NS
MW-7-20	NS	NS	NS	NS	NS	NS	NS	NS
MW-6-90	12/11/2017	5.34	83.7	6.72	0.674	29.13	0.438	5.2
MW-9-90	12/6/2017	4.81	112.1	6.75	0.436	28.77	0.284	1.6
MW-1B-1BR	11/28/2017	0.73	28.0	7.26	0.639	28.45	0.415	0.0
MW-1B-1BR-BP	11/13/2017	1.05	90.7	7.30	0.634	29.55	0.412	7.4
MW-1B-2	1/11/2018	1.88	14.6	7.21	0.633	28.96	0.412	4.4
MW-1B-3	1/11/2018	1.96	149.8	7.06	0.631	29.03	0.410	20.0
MW-1B-4	11/28/2017	2.45	112.1	6.91	0.575	29.82	0.374	26.4
MW-1B-4-BP	11/13/2017	2.26	113.9	6.91	0.576	30.21	0.374	65.3
PCMW-2	11/28/2017	2.66	63.7	7.12	0.598	29.17	0.389	4.5
PCMW-2-BP	11/13/2017	2.36	92.3	7.13	0.596	30.34	0.388	37.9
MW-1A-1BR	12/8/2017	0.34	(176.9)	7.49	0.823	28.41	0.535	212.2
MW-1A-2	12/11/2017	3.26	46.6	6.09	0.503	28.68	0.327	26.6

Table 3
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Well ID	Date Groundwater Sample Collected	Groundwater Field Parameters						
		Dissolved Oxygen (DO; mg/L)	Oxidation-Reduction Potential (ORP; mV)	pH (S.U.)	Specific Conductivity (mS/cm)	Temperature (°C)	Total Dissolved Solids (TDS; g/L)	Turbidity (NTU)
MW-1A-3	12/8/2017	3.96	53.6	6.90	0.515	28.52	0.335	0.0
MW-1A-3-BP-50	12/4/2017	2.83	(2.6)	7.01	0.509	28.42	0.331	106.3
MW-1A-4	12/8/2017	4.27	(17.7)	7.00	0.517	28.44	0.336	0.0
PRASA-2	NS	NS	NS	NS	NS	NS	NS	NS
PCMW-1	1/11/2018	0.38	(46.8)	6.87	0.571	28.84	0.371	7.2
AN-1	12/19/2017	4.86	164.5	6.71	0.631	28.92	0.410	0.0
OW-1	12/20/2017	6.83	143.2	6.83	0.562	28.82	0.366	9.4
RW-5	1/9/2018	5.55	169.1	7.22	0.606	28.42	0.394	0.0
PCMW-5	12/20/2017	7.13	68.0	6.98	0.618	28.82	0.402	351.7
MW-5-90	12/21/2017	1.79	82.4	7.04	0.724	29.33	0.473	5.5
AN-2	12/21/2017	5.92	216.1	6.52	0.553	28.86	0.360	0.0
PRASA-3	NS	NS	NS	NS	NS	NS	NS	NS
PRASA-4	NS	NS	NS	NS	NS	NS	NS	NS
MW-3A-1BR	12/27/2017	0.41	83.1	7.36	0.709	27.82	0.461	0.0
MW-3A-2	12/27/2017	1.19	98.2	6.97	0.511	28.19	0.332	0.0
MW-3A-3	12/27/2017	0.35	(8.5)	6.70	0.540	28.62	0.351	0.3
MW-3A-4	12/5/2017	0.77	93.9	6.72	0.381	29.09	0.248	22.0
RW-1	1/16/2018	0.82	38.2	6.62	0.500	28.30	0.326	219.3
PRASA-5	NS	NS	NS	NS	NS	NS	NS	NS
RW-2	1/3/2018	4.81	177.6	7.06	0.609	29.04	0.396	0.0
MW-1C-1BR-A	11/17/2017	0.76	119.2	7.13	2.943	28.59	1.913	437.5
MW-1C-1BR-A-BP	11/9/2017	10.52	139.9	7.30	3.113	28.10	2.024	7.0
MW-1C-2	1/8/2018	2.85	107.5	7.19	0.512	28.35	0.333	26.3
MW-1C-3	1/8/2018	4.67	147.0	6.74	0.407	28.65	0.265	0.0
MW-1C-4	1/8/2018	1.44	124.0	6.55	0.496	28.55	0.322	37.9
FMW-4-20	12/28/2017	0.60	65.9	6.66	0.683	28.86	0.444	31.7
FMW-4-90	12/28/2017	3.19	79.6	6.90	0.589	28.07	0.383	6.2
MW-2C-1BR	1/4/2018	0.92	127.6	7.20	0.593	27.49	0.385	0.8
MW-2C-2	1/4/2018	1.65	58.3	7.04	0.592	27.70	0.385	1.0
MW-2C-3	11/27/2017	7.58	131.8	6.79	0.549	27.40	0.357	41.6
MW-2C-3-BP	11/14/2017	3.00	190.0	6.80	0.606	27.52	0.395	0.0
MW-2C-4	1/4/2018	1.03	134.9	6.95	0.661	27.98	0.429	0.9
MW-2C-5	1/4/2018	1.09	49.0	6.63	0.815	28.83	0.530	3.1
USGS-TW-C2	NS	NS	NS	NS	NS	NS	NS	NS
USGS-TW-C1	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
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Well ID	Date Groundwater Sample Collected	Groundwater Field Parameters						
		Dissolved Oxygen (DO; mg/L)	Oxidation-Reduction Potential (ORP; mV)	pH (S.U.)	Specific Conductivity (mS/cm)	Temperature (°C)	Total Dissolved Solids (TDS; g/L)	Turbidity (NTU)
MW-1	12/5/2017	3.23	107.3	6.64	0.369	28.21	0.369	6.9
MW-4B-1BR	11/15/2017	0.87	35.4	7.27	1.266	27.80	0.823	0.0
MW-4B-1BR-BP	11/10/2017	8.28	113.7	7.42	1.206	29.25	0.784	20.0
MW-4B-2	12/5/2017	2.37	64.2	7.18	0.718	28.05	0.467	0.0
MW-4B-3	11/30/2017	3.37	83.4	7.09	0.534	28.03	0.347	0.0
MW-4B-3-BP	11/10/2017	3.42	53.8	7.18	0.532	28.12	0.346	263.1
MW-4B-4	12/5/2017	3.63	116.4	6.67	0.424	28.29	0.275	0.0
MW-2	1/10/2018	2.99	165.9	6.74	0.601	28.23	0.390	155.8
RW-3	1/16/2018	0.65	(100.2)	6.69	0.511	28.41	0.332	28.7
MW-4C-1BR	1/16/2018	1.98	168.9	7.31	0.672	27.77	0.437	0.0
MW-4C-2	1/10/2018	2.53	54.2	7.01	0.550	27.86	0.358	0.0
MW-4C-3	1/16/2018	3.38	208.1	6.66	0.497	28.13	0.323	44.9
MW-4C-4	1/10/2018	3.63	120.1	6.59	0.512	28.24	0.333	29.5
FMW-3-90	11/30/2017	2.01	96.6	7.03	0.561	27.88	0.365	0.0
FMW-3-90-BP	11/14/2017	1.90	154.1	7.47	0.609	27.95	0.395	8.4
USGS-TW-A2	1/9/2018	2.32	196.3	6.68	1.308	27.69	0.850	10.2
USGS-TW-A1	1/9/2018	0.87	147.4	6.78	0.510	27.70	0.332	0.0
RW-4	1/3/2018	3.10	157.4	6.74	0.581	27.72	0.377	0.0
FMW-2-90	11/27/2017	6.43	85.3	7.31	0.555	27.23	0.361	0.0
FMW-2-90-BP	11/14/2017	1.91	44.4	7.18	0.604	29.80	0.393	228.9
CORE-PROD-7	NS	NS	NS	NS	NS	NS	NS	NS
MW-4D-1BR	1/12/2018	2.63	84.5	7.22	0.626	27.62	0.407	0.0
MW-4D-2	1/12/2018	2.58	111.1	7.26	0.630	27.67	0.410	0.0
MW-4D-3	1/12/2018	1.41	102.0	7.32	0.635	28.08	0.413	22.4
MW-4D-4	1/12/2018	1.78	123.8	6.81	0.563	27.77	0.366	0.0
CORE-PROD-2	NS	NS	NS	NS	NS	NS	NS	NS
CORE-PROD-4	NS	NS	NS	NS	NS	NS	NS	NS
CORE-PROD-3	NS	NS	NS	NS	NS	NS	NS	NS
CORE-PROD-5	NS	NS	NS	NS	NS	NS	NS	NS
FMW-1-20	12/1/2017	2.08	62.7	6.96	1.040	27.98	0.676	11.7
FMW-1-90	12/1/2017	1.01	37.4	7.23	0.928	27.72	0.603	0.0
FMW-6-90	1/10/2018	1.39	109.9	7.30	0.677	27.50	0.440	0.0
SKF-721	NS	NS	NS	NS	NS	NS	NS	NS
CORE-PROD-6	NS	NS	NS	NS	NS	NS	NS	NS
SKF-720	NS	NS	NS	NS	NS	NS	NS	NS
SKF-722	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
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Well ID	Date Groundwater Sample Collected	Groundwater Field Parameters						
		Dissolved Oxygen (DO; mg/L)	Oxidation-Reduction Potential (ORP; mV)	pH (S.U.)	Specific Conductivity (mS/cm)	Temperature (°C)	Total Dissolved Solids (TDS; g/L)	Turbidity (NTU)

Notes
mg/L: milligrams per liter.
mV: millivolts.
S.U.: Standard Units.
mS/cm: millisiemens per centimeter.
°C: degrees Celsius.
g/L: grams per liter.
NTU: Nephelometric Turbidity Units.
NR: no reading.
NS: not sampled.
(121.9): indicates negative ORP value.

Table 4
Groundwater Volatile Organic Compound (VOC) Detected Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location ID / Sample ID	Well Screen Interval (ft bgs)	Lab ID	Date Groundwater Sample Collected	VOC	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	1,1,2-Trichlorotrifluoroethane	Acetone	Carbon Tetrachloride	Chloroform	Trichlorofluoromethane	HALOETHERS (1)	Enflurane	Haloether 229	Haloether 406	Haloether 508	Haloether 528	Halomar	Isoflurane	Methoxyflurane	Total Haloethers
			GWCC		5	5	70	2	50	50	5	100	50		50	50	50	50	50	50	50	50	100
ES-21*	--	2066110014	11/29/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
AWPI-MW-1	--	2069189008	1/11/2018		3.1	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
AWPI-MW-2	--	2069189009	1/11/2018		**5.8**	1.0 U	1.0 U	1.0 U	1.0 U	9.7 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
ES-19	21 - 41	2069189007	1/11/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1D-1BR	125 - 145	2066833004	12/7/2017		4.2	1.0 U	1.0 U	1.0 U	1.0 U	4.2 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10.3	1.0 U	10.3
MW-1D-2	65 - 70	2066833006	12/7/2017		4.3	1.0 U	1.0 U	1.0 U	1.0 U	5.9 UB	1.0 U	1.0 U	1.0 U		2.6	1.3	1.0 U	1.0 U	1.0 U	7.1	9.1	1.0 U	20.1
MW-1D-3	45 - 55	2066645013	12/6/2017		3.7	1.0 U	1.0 U	1.0 U	1.0 U	5.9 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	25.6	1.0 U	1.0 U	29.7	1.0 U	55.2
MW-1D-3-BP*	45 - 55	2066645005	12/4/2017		4.5	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	**127**	1.0 U	1.0 U	7.2	1.0 U	**134**
MW-1D-4	25 - 35	2066833005	12/7/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	4.1	1.0 U	1.0 U	3.6	1.0 U	7.7
MW-15-90	--	2067491012	12/13/2017		3.1	1.4	1.0	1.0 U	1.0 U	4.2 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-11-20	15 - 20	2067491008	12/12/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		5.0	1.0 U	1.0 U	1.0 U	1.0 U	2.7	1.0 U	1.0 U	7.7
MW-17-90	--	2067491013	12/13/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-19-90	--	2067491009	12/12/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.4 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-22-90	30 - 90	2067700004	12/19/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
GWDUP002 of MW-22-90	30 - 90	2067700005	12/19/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-4-90	12 - 96	2067700008	12/20/2017		1.0	1.0 U	1.0 U	1.0 U	3.0	4.0 U	1.0 U	1.0 U	1.0 U		6.9	1.0 U	1.0 U	5.0	1.0 U	5.0	7.3	1.0 U	24.2
MW-6-90	23 - 75	2067491005	12/11/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	5.1	1.0 U	1.0 U	2.7	1.0 U	7.8
MW-9-90	14 - 43	2066645015	12/6/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1B-1BR*	90 - 120	2066110010	11/28/2017		**33.7**	2.6	3.0	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1B-1BR-BP*	90 - 120	2065701004	11/13/2017		**53.4 J**	3.5	4.7	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.5		1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1B-2	47 - 57	2069189005	1/11/2018		1.3	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1B-3	37 - 42	2069189004	1/11/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1B-4*	26 - 31	2066110011	11/28/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1B-4-BP*	26 - 31	2065701005	11/13/2017		1.6	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
PCMW-2*	24 - 39	2066110008	11/28/2017		**10.5**	1.5	2.0	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
GWDUP001 of PCMW-2*	24 - 39	2066110009	11/28/2017		**9.6**	1.3	1.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
PCMW-2-BP*	24 - 39	2065701006	11/13/2017		**21.2**	2.5	2.2	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1A-1BR	125 - 145	2066833010	12/8/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.6	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1A-2	60 - 70	2067491004	12/11/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.4	1.0 U	3.6	1.0 U	1.0 U	8.1	1.0 U	13.1
MW-1A-3	45 - 55	2066833009	12/8/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.8	1.0 U	1.0 U	1.0 U		1.0 U	5.1	1.0 U	30.6	1.0 U	1.0 U	23.3	1.0 U	59.0
MW-1A-3-BP*	45 - 55	2066645004	12/4/2017		1.8	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.9	4.3	1.0 U	**54.7**	1.3	1.0	19.3	1.0 U	82.5
MW-1A-4	36 - 41	2066833011	12/8/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.0	1.0 U	1.0 U	1.0 U		1.0 U	8.0	1.0 U	36.7	1.1	1.0 U	38.7	1.0 U	84.5
PCMW-1	23 - 38	2069189006	1/11/2018		1.0 U	1.0 U	4.2	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
AN-1	--	2067700006	12/19/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
OW-1	35 - 75	2067700010	12/20/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	47.8	1.0 U	1.0 U	1.7	1.0 U	49.5
RW-5	40 - 80	2068819012	1/9/2018		**16.8**	1.0	1.4	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		2.5	8.3	1.0 U	**58.3**	1.0 U	1.4	32.8	1.0 U	**103**
PCMW-5	37 - 52	2067700011	12/20/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	6.9	1.0 U	1.0 U	1.8	1.0 U	8.7
MW-5-90	23 - 72	2067700015	12/21/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	3.4	1.0 U	1.0 U	8.5	1.0 U	11.8
AN-2	--	2067700014	12/21/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	3.1	1.0 U	1.0 U	7.1	1.0 U	10.2
MW-3A-1BR	140 - 160	2067983004	12/27/2017		2.5	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-3A-2	60 - 70	2067983005	12/27/2017		**14.8**	2.2	34.7	2.6	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-3A-3	43 - 53	2067983006	12/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.6	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-3A-4	30 - 35	2066645011	12/5/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.9 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
RW-1	32 - 72	2069066008	1/16/2018		1.3	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FMW-5-90*	59 - 79	2065701014	11/15/2017		**5.1**	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	**97.3**	1.0 U	1.0 U	8.5	1.0 U	**106**
FMW-5-90-BP*	59 - 79	2065329004	11/8/2017		**5.0**	1.0 U	1.1	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.2	1.0 U	**123**	1.0 U	1.0 U	10.5	1.0 U	**134**
RW-2	32 - 72	2068274004	1/3/2018		4.4	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.5	12.7	1.0 U	33.9	1.2	1.0 U	**65.2**	1.0 U	**115**
MW-1C-1BR-A*	125 - 145	2065701018	11/17/2017		**10.7**	1.0 U	1.8	1.0 U	1.0 U	6.8 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.5	1.0 U	4.9	1.0 U	1.0 U	15.4	1.0 U	21.8

Table 4
Groundwater Volatile Organic Compound (VOC) Detected Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

ARCADIS Design & Consultancy for natural and built assets

Location ID / Sample ID	Well Screen Interval (ft bgs)	Lab ID	Date Groundwater Sample Collected	VOC	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	1,1,2-Trichlorotrifluoroethane	Acetone	Carbon Tetrachloride	Chloroform	Trichlorofluoromethane	HALOETHERS (1)	Enflurane	Haloether 229	Haloether 406	Haloether 508	Haloether 528	Halomar	Isoflurane	Methoxyflurane	Total Haloethers
			GWCC		5	5	70	2	50	50	5	100	50		50	50	50	50	50	50	50	50	100
MW-1C-1BR-A-BP*	125 - 145	2065329007	11/9/2017		**16.6**	1.0 U	3.2	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.5	1.0 U	9.5
MW-1C-2	50 - 65	2068819004	1/8/2018		3.1	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1C-3	40 - 45	2068819005	1/8/2018		2.0	1.0 U	1.0 U	1.0 U	1.0 U	5.7 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-1C-4	25 - 35	2068819006	1/8/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FMW-4-20	10 - 20	2067983009	12/28/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0	14.3	1.0 U	6.3	1.0 U	1.0 U	**162**	1.0 U	**182**
FMW-4-90	61 - 76	2067983010	12/28/2017		1.0	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	25.3	1.0 U	15.4	1.0 U	1.0 U	**198**	1.0 U	**238**
MW-2C-1BR	125 - 150	2068274008	1/4/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	2.0	1.0 U	6.4	1.0 U	1.0 U	15.6	1.0 U	24.0
MW-2C-2	64 - 74	2068274010	1/4/2018		3.1	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.7	42.8	1.7	49.6	1.0 U	1.0 U	**165 D**	1.0 U	**261 D**
MW-2C-3*	47 - 52	2066110005	11/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	14.7	1.0 U	7.6	1.0 U	1.0 U	**76.6**	1.0 U	98.9
MW-2C-3-BP*	47 - 52	2065701009	11/14/2017		2.9	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.4	34.5	1.1	29.1	1.0 U	1.0 U	**147**	1.0 U	**213**
MW-2C-4	28 - 33	2068274009	1/4/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	3.5	1.0 U	6.2	1.0 U	1.0 U	18.1	1.0 U	27.8
MW-2C-5	15 - 20	2068274011	1/4/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	5.3	1.0 U	4.5	1.0 U	1.0 U	25.5	1.0 U	35.2
MW-1	29.5 - 49.5	2066645010	12/5/2017		2.2	1.0 U	1.0 U	1.0 U	1.0 U	8.4 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-4B-1BR*	140 - 160	2065701015	11/15/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.1 UB	1.0 U	1.1	1.0 U		6.2	17.2	1.1	16.7	1.0 U	4.7	**163**	1.0	**210**
MW-4B-1BR-BP*	140 - 160	2065329010	11/10/2017		1.0 U	1.0 U	1.0 U	1.0 U	4.8	4.0 U	1.0 U	1.4	1.0 U		7.4	35.5	1.5	**146**	1.0 U	6.1	**103**	1.7	**301**
MW-4B-2	70 - 80	2066645008	12/5/2017		2.0	1.0 U	1.0 U	1.0 U	1.6	4.0 U	1.0 U	1.2	1.0 U		5.8	7.6	1.3	28.1	1.0 U	6.0	**155**	1.7	**205**
MW-4B-3*	52 - 57	2066562005	11/30/2017		2.7	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.3	1.0	1.0 U	28.3	1.0 U	1.0 U	10.6	1.0 U	41.3
MW-4B-3-BP*	52 - 57	2065329011	11/10/2017		**12.6**	1.0 U	1.2	1.0 U	5.5 J	4.0 U	1.0 U	1.0	1.0 U		6.4	11.0	1.0 U	**145 D**	3.8	4.4	**58.1**	1.2	**229 D**
MW-4B-4	39 - 44	2066645009	12/5/2017		1.4	1.0 U	1.0 U	1.0 U	1.0 U	5.6 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
MW-2	24.5 - 44.5	2068819016	1/10/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	6.6	1.0 U	1.0 U	2.8	1.0 U	9.4
RW-3	38 - 78	2069066006	1/16/2018		1.7	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.1
GW-DUP004 of RW-3	38 - 78	2069066007	1/16/2018		1.8	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.5
MW-4C-1BR	130 - 150	2069066004	1/16/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		4.1	7.6	1.0 U	9.3	1.0 U	1.4	**97.8**	1.0 U	**120**
MW-4C-2	70 - 80	2068819017	1/10/2018		2.0	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		3.8	4.2	1.0 U	16.7	1.0 U	1.3	28.0	1.0 U	54.0
MW-4C-3	51 - 56	2069066005	1/16/2018		1.6	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	3.1	1.0 U	1.0 U	2.5	1.0 U	5.7
MW-4C-4	37 - 42	2068819018	1/10/2018		1.7	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FMW-3-90*	65 - 80	2066562004	11/30/2017		**7.5**	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		2.3	1.7	1.0 U	40.0	1.0 U	1.3	12.7	1.0 U	58.1
FMW-3-90-BP*	65 - 80	2065701010	11/14/2017		**24.8**	1.0 U	1.5	1.0 U	2.3	4.0 U	1.0 U	1.0 U	1.0		5.5	3.7	1.0 U	**75.5**	1.0 U	2.3	30.8	1.0 U	**118**
USGS-TW-A1	47 - 77	2068819010	1/9/2018		3.5	1.1	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	7.4	1.0 U	1.0 U	4.5	1.0 U	12.0
GWDUP003 of USGS-TW-A1	47 - 77	2068819011	1/9/2018		3.4	1.1	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	7.6	1.0 U	1.0 U	4.7	1.0 U	12.3
USGS-TW-A2	10 - 20	2068819009	1/9/2018		1.7	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	2.7	1.0 U	1.0 U	3.8	1.0 U	6.5
RW-4	40 - 80	2068274005	1/3/2018		3.2	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	2.9	1.0 U	31.9	1.0 U	1.0 U	21.5	1.0 U	56.3
FMW-2-90*	69 - 84	2066110004	11/27/2017		**9.4**	1.0 U	1.0 U	1.0 U	2.5	4.0 U	1.0 U	1.4	1.0 U		12.3	14.5	1.9	**98.1**	1.0	3.7	**70.4**	1.0 U	**202**
FMW-2-90-BP*	69 - 84	2065701011	11/14/2017		**11.3**	1.0 U	1.0 U	1.0 U	2.9	4.0 U	1.0 U	1.5	1.0 U		13.7	14.1	1.9	**109**	1.0 U	4.1	**74.6**	1.0 U	**217**
MW-4D-1BR	128 - 148	2069189012	1/12/2018		1.0	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		2.1	1.4	1.0 U	8.0	1.0 U	1.1	10	1.0 U	22.6
MW-4D-2	80 - 85	2069189014	1/12/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.4	1.3	1.0 U	3.8	1.0 U	1.0 U	8.7	1.0 U	15.2
MW-4D-3	65 - 70	2069189015	1/12/2018		2.9	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		5.1	6.8	1.0 U	7.9	1.0 U	1.4	27.0	1.0 U	48.1
MW-4D-4	44 - 49	2069189013	1/12/2018		1.3	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	3.1	1.0 U	1.0 U	2.1	1.0 U	5.2
FMW-1-20*	10 - 20	2066562009	12/1/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.1 UB	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.8	1.0 U	2.8
FMW-1-90*	74 - 89	2066562008	12/1/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.3	2.0	1.0 U	3.9	1.0 U	1.0 U	7.3	1.0 U	14.5
FMW-6-90	49.5 - 69.5	2068819015	1/10/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	2.2	1.0 U	4.1	1.0 U	1.0 U	10.6	1.0 U	16.8
FB-20171108	--	2065329003	11/8/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171109	--	2065329006	11/9/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171110	--	2065329009	11/10/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.5	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171113	--	2065701003	11/13/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.2	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171114	--	2065701008	11/14/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171115	--	2065701013	11/15/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.4	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171717	--	2065701017	11/17/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.6	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND

Table 4
Groundwater Volatile Organic Compound (VOC) Detected Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location ID / Sample ID	Well Screen Interval (ft bgs)	Lab ID	Date Groundwater Sample Collected	VOC	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	1,1,2-Trichlorotrifluoroethane	Acetone	Carbon Tetrachloride	Chloroform	Trichlorofluoromethane	HALOETHERS (1)	Enflurane	Haloether 229	Haloether 406	Haloether 508	Haloether 528	Halomar	Isoflurane	Methoxyflurane	Total Haloethers
			GWCC		5	5	70	2	50	50	5	100	50		50	50	50	50	50	50	50	50	100
FB-20171127	--	2066110003	11/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB 20171128	--	2066110007	11/28/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171129	--	2066110013	11/28/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171130	--	2066562003	11/30/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.4	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171201	--	2066562007	12/1/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.8	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171204	--	2066645003	12/4/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.5	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171205	--	2066645007	12/5/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171206	--	2066645014	12/6/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.4	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171207	--	2066833003	12/7/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171208	--	2066833008	12/8/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171211	--	2067491003	12/11/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171212	--	2067491007	12/12/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.0	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171213	--	2067491011	12/13/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	16.1	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171219	--	2067700003	12/13/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10.7	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171220	--	2067700009	12/20/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171221	--	2067700012	12/21/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.3	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171227	--	2067983003	12/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20171228	--	2067983008	12/28/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180103	--	2068274003	1/3/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.7	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180104	--	2068274007	1/4/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	12.8	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180108	--	2068819003	1/8/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.1	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180109	--	2068819008	1/9/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.3	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180110	--	2068819014	1/10/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180111	--	2069189003	1/11/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180112	--	2069189011	1/12/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
FB-20180116	--	2069066003	1/16/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171107	--	2065329001	11/7/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171113	--	2065701001	11/13/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171127	--	2066110001	11/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171130	--	2066562002	11/30/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171204	--	2066645001	12/4/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171207	--	2066833001	12/7/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.5	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171211	--	2067491001	12/11/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171219	--	2067700001	12/23/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20171227	--	2067983001	12/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20180103	--	2068274001	1/3/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.3	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20180108	--	2068819001	1/8/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20180111	--	2069189001	1/11/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
TB-20180116	--	2069066001	1/16/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171108	--	2065329002	11/8/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171109	--	2065329005	11/9/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171110	--	2065329008	11/10/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171113	--	2065701002	11/13/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.7	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171114	--	2065701007	11/14/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171115	--	2065701012	11/15/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171717	--	2065701016	11/17/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.7	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171127	--	2066110002	11/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171128	--	2066110006	11/28/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND

Table 4
Groundwater Volatile Organic Compound (VOC) Detected Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location ID / Sample ID	Well Screen Interval (ft bgs)	Lab ID	Date Groundwater Sample Collected	VOC	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	1,1,2-Trichlorotrifluoroethane	Acetone	Carbon Tetrachloride	Chloroform	Trichlorofluoromethane	HALOETHERS (1)	Enflurane	Haloether 229	Haloether 406	Haloether 508	Haloether 528	Halomar	Isoflurane	Methoxyflurane	Total Haloethers
			GWCC		5	5	70	2	50	50	5	100	50		50	50	50	50	50	50	50	50	100
EB-20171129	--	2066110012	11/29/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171130	--	2066562001	11/30/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.6	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171201	--	2066562006	12/1/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171204	--	2066645002	12/4/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.0	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171205	--	2066645006	12/5/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171206	--	2066645012	12/6/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.3	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171207	--	2066833002	12/7/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171208	--	2066883007	12/8/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171211	--	2067491002	12/11/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171212	--	2067491006	12/12/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171213	--	2067491010	12/13/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10.2	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171219	--	2067700002	12/19/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.4	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171220	--	2067700007	12/20/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.5	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171221	--	2067700013	12/21/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.9	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171227	--	2067983002	12/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20171228	--	2067983007	12/27/2017		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180103	--	2068274002	1/3/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180104	--	2068274006	1/4/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	12.6	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180108	--	2068819002	1/8/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.5	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180109	--	2068819007	1/9/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180110	--	2068819013	1/10/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180111	--	2069189002	1/11/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	11.3	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180112	--	2069189010	1/12/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND
EB-20180116	--	2069066002	1/16/2018		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	ND

Notes
Results from United States Environmental Protection Agency (USEPA) Method 5030B/8260 analysis.
ft bgs: feet below ground surface.
VOC: volatile organic compounds.
Units in µg/L (micrograms per liter).
GWCC: Ground Water Cleanup Criteria (USEPA Maximum Contaminant Level [MCL] Drinking Water Standards).
*: Groundwater sampled during non-pumping conditions; Groundwater Extraction and Treatment System (GWETS) shut down 9/5/2017 through 12/5/2017 due to regional and equipment issues associated with Hurricanes Irma and Maria.
FB: field blank.
EB: equipment blank.
TB: trip blank.
BP: bladder pump.
-- : Well screen interval data not available.
(1): Haloethers GWCC based on default standard for VOC of 50 µg/L per individual compound or 100 µg/L for total of compounds.
U: The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
ND: Non-detect.
Bold values exceed GWCC.
J: The compound was positively identified; however, the associated numerical value is an estimated concentration only.
UJ: The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
D: Concentration is based on a diluted sample analysis.
UB: Compound considered non-detect at the listed value due to associated blank contamination.

Table 5
Groundwater Chloride Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Location / Field Sample ID	Lab Sample ID	Sample Date	Dilution Factor	Chloride
			SDWS	**250***
FMW-6-90	2068819015	1/10/2018	5	73.2
SKF-722	Not Sampled			

Notes

Results from United States Environmental Protection Agency (USEPA) Method 300.0 analysis.

Units in mg/L (milligrams per liter).

SDWS: USEPA Secondary (aesthetic) Drinking Water Standards.

* The secondary level of 250 mg/L is based on aesthetic concerns and is only advisory in the Federal Safe Drinking Water program.

Table 6
Historical Groundwater Tetrachloroethene (PCE) Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Location	Groundwater Monitor Wells																						GWPW	Groundwater Extraction Wells				
	AN-1	AWPI-MW-1	FMW-1-90	FMW-2-90	FMW-3-90	FMW-4-20	FMW-4-90	FMW-5-90	MW-1	MW-4-90	MW-5-90	MW-7-20	MW-9-90	MW-10-90	MW-15-90	MW-17-90	MW-22-90	OW-1	PCMW-2	PCMW-5	USGS-TW-A1	USGS-TW-A2	CORE PROD 5	RW-1	RW-2	RW-3	RW-4	RW-5
Date																												
Aug-87																			**198/110**	**30.4**								
Nov-87																			**180/230**	**24**	2.0 U	2.0 U						
Apr-90		**45**																	**130**	**15**	0.90 J	3.0	**6.1**					
Nov-91	**11/18**									2.0 U	**8/18**		**18/21**	2.0 U/18							2.0 U	2.0 U						
Mar-93	3.3													4.4					**98 D**		0.99/1.0							
May-96	3.1	**13**								**8.3**				4.2					**71**	**6.2**	1.4	0.37 J						
Oct-96*	3.0									3.5	3.5	2.0 U	2.0 U	2.0 U						2.0 U								
Feb-98	3.0 J	0.87 U	0.62	2.0 J	3.4 J	**7.1**	2.1 J	**8.7**		**5.1**		1.3 U		44 U	**36**	1.2 J			**32**	2.9 J			3.1 J					
Jul-98	3.1 U													3 J	**35**				**50**				3.2					
Sep-98		0.87 U	0.27																**27**		1.5 J		6.3 U					
Oct-98				1.0	**12**	3.7	1.4	**9.6**		**6.6**		2.1 J		1.3 U	**6.1**	0.87 U				6.3 U								
May-99																												
GWETS COMMENCED OPERATION (RW-1, RW-2, RW-3, RW-4 PUMPING)																												
Jul-99	1.8 J	**14**	0.88	3.1 J	**9.7**	**8.5**	3.8	**20**		2.2 J	1.9 J		0.77	3.1.0 U	**17**	**7.8**	**5.2**		**37**	2.4 J	1.5 J		6.3 U		**8.0**	**8.4**	1.4 J	
Oct-99																	0.48 J											
Dec-99														**6.6**		**31**												
Jan-00			1.2	3.7	**8.3**	4.4	3.1	4.2 J																				
Feb-00	1.8 J	0.48 U								0.54 J	3.4	0.98 J	1.7 J	**6.2**	**28**	**19**	0.48 U		**24**	2.5 J	1.0 J	0.48 U		**32**	**7.0**	**7.5**	1.0 J	
Mar-00														**5.2**		**25**												
Apr-00														3.2 J		**17**	0.64 J											
May-00														3.5 J		**12**												
Jun-00														3.2 J		**17**												
Jul-00	1.3 J	**8.6**	1.2	0.57	**8.2**	3.4	**6.0**	**13**		2.0	2.9 J		0.71	3.6	**25**	**5.4**	0.47 J		**37**	2.6 J	0.87 J			**27**	5.0 J	**6.9**	0.78	
Aug-00														3.0 J		**8.5**												
Sep-00														3.3 J		**7.7**												
Oct-00														3.7 J		**28**												
Nov-00																	0.55 J											
Dec-00														2.2 J		**21**												
Feb-01			0.93 J	2.7 J	**9.2**	1.6 J	2.5 J	21 J		1.4 J			0.4 J		**23**		0.37 U		**42**		1.4						0.92	
Mar-01	3.7 U										**13**			1.7		**23**				3.7 U				**26**	4.8 J	**8.6**		
May-01														1.6 J		**26**												
Jun-01														1.6 J		**32**												
Aug-01	2.7 U	**5.9**	0.97 J	1.6	**5.3**	0.87	3.7	8.4 J		1.0	4.8 J		0.58	1.9	**31**	**31**	0.3 J		**20**	2.7 U				**28**	**6.6**	**12**	1.3	
Nov-01														2.7 U		**26**												
Feb-02	3.9 U	**5.7**	1.4 J	3.4 J	**12**	0.81 J	3.9 J	4.5 J		2.7 J	**7.2**		0.27 J	0.79 U	**13**	2.4 J	0.47 J		**52**	4.0 J	1.4 J			**23**	**9.9**	**9.1**	1.8 J	
Sep-02	25 U	1.0 U	1.0 U	3.4	2.8	1.0 U	3.3	25 U		2.4	5 U		1.0 U	1.0 U	**39.8 E**	4.5	1.0 U		**23**		5 U			**22.6 E**	20 U	**9.0**	2.2	
Mar-03	10 U		2.1	3.5	**9.4**	1.0 U	1.7	3.9		3.7	**5.8**		1.0 U	20 U	**60.9**	**5.7**	1.0 U		**31.4**	10.0 U	2.3			**20.2**	**8.8**	**5.1**	1.9	
Sep-03	3.5		1.1	4.1	**13.5**	1.0 U	1.5	**6.5**	**6.2**	3.4	**14.4**		1.0 U	3.7	**56.7**	**6.8**	1.0	1.0 U	**27**	2.0	2.0			**15.4**	**9.4**	**5.2**	2.5	
Mar-04	50 U	3.13		**5.8**	**18.8**	1.0 U	2.39	**5.46**	3.95	10 U	1.0 U	1.0 U	**7.48**	4.09	4.72	**6.69**	1.01	1.0 U	**38.5**	100 U	2.55		3.39	**17.6**	**9.93**	**7.26**	2.86	
Jun-04																				1.0 U								
Sep-04	1.29	**11.2**	**5.33**	3.0	**15.3**	2.11	**6.66**	**5.84**	4.98	3.47	**13.8**	1.0 U	2.31		**7.61**	**5.49**	1.0 U	2.41	**20.4**	2.31	3.04		2.51	**21.0**	**19.9**	**10.0**	4.25	

Table 6
Historical Groundwater Tetrachloroethene (PCE) Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Location	Groundwater Monitor Wells																						GWPW	Groundwater Extraction Wells				
	AN-1	AWPI-MW-1	FMW-1-90	FMW-2-90	FMW-3-90	FMW-4-20	FMW-4-90	FMW-5-90	MW-1	MW-4-90	MW-5-90	MW-7-20	MW-9-90	MW-10-90	MW-15-90	MW-17-90	MW-22-90	OW-1	PCMW-2	PCMW-5	USGS-TW-A1	USGS-TW-A2	CORE PROD 5	RW-1	RW-2	RW-3	RW-4	RW-5
Date																												
RW-5 COMMENCED PUMPING																												
Feb-05	1.18	**5.3 J**	1.0 U	3.95 J	**12.1 J**	**7.26**	3.49 J	4.96 J	2.37 J	3.16 J	2.15 J	1.0 U	1.00 J		**47.9 J**		2.18	1.0 U	**22.5 J**	1.00 J	1.39		1.98	**12.4 J**	3.88 J	**5.13 J**	1.91	**36.1 J**
Sep-05	1.59	1.00 U	4.15	**5.87**	**7.81**	4.76	**5.2**	**9.1**	**5.32**	4.82	3.05	1.0 U	1.0 U	3.48	**47.4**	3.62	1.0 U	1.19	**34.0**	1.39	2.45		2.63	**14.5**	**5.09**	**7.44**	2.40	**45.5**
Mar-06	**5.34 J**	**5.38 J**	1.93	1.02	**10.8**	2.42	2.49	**8.56**	**6.9 J**	**5.75 J**	**5.11**	**5.12 J**	**6.30 J**	**9.15 J**	**7.92 J**	**9.48 J**	4.99 J	4.90 J	**21.5 J**	**5.19 J**	**5.28**	**5.72**	**7.51**	**12.8**	**6.89**	**7.18**	**5.22**	
Sep-06	1.29	1.0 U	3.28	**6.98**	**15.4**	1.51	2.91	**12.4**	1.28	3.37	1.0 U	1.12	1.14	1.0 U	**64.3**	**5.90**	1.01	1.09	**14.4**	1.28	1.11		2.84	**14.5**	2.74	**5.54**	1.54	
Mar-07	2.1	3.13	4.90	**9.86**	**20.1**	3.64	1.0 U	**7.49**	**7.38**	**6.71**	3.26	1.20	2.48	1.0 U	**79.4**	**10.6**	**9.61**	**8.02**	**21.8**	2.95	1.94	1.32	**7.19**	**23.1**	**5.92**	**9.20**	1.86	
Sep-07	2.24 J		**5.25**	**11.8J**	**21.6**	**7.08**	4.77	**10.6**	**7.91**	**6.25**	**7.11**		1.59 J		**82.6**	**9.66**	1.80	**5.67**	**47.0 J**	2.86	3.63	1.10	4.77	**24 J**	**9.11 J**	**11.1 J**	1.98 J	1.00
Mar-08	1.99	1.27	1.80	**8.98**	**13.2**	3.57	4.22	**7.28**	**6.31**	**5.77**	3.64		1.38		**42.5**	**7.1**	1.0 U	1.45	**28.3**	1.98	1.96	1.19	1.0 U	**16.4**	3.98	**8.35 J**	2.20	**41.3**
Sep-08	1.0 U	2.56 J	2.96	**9.47 J**	**14.7 J**	1.0 U	4.79 J	**7.2 J**	**6.66 J**	**5.56**	1.0 U	2.61	3.14		**5.31 J**	2.72	2.59	3.09	**14.7 J**	2.99	4.17 J	4.23 J	1.0 U	**9.25**	**6.24**	4.17	**9.44**	
Mar-09	1.64	**8.03**	1.0 U	**6.19**	**14.3**	2.83	1.0 U	3.32	3.4	4.00	1.0 U	1.01	2.33		**5.85**	1.0 U	1.0 U	1.16	**23.6**	1.50	1.57		**6.73**	**13.0**	3.62	**7.9**	2.00	**34.2**
Sep-09	1.0 U	1.01	1.0 U	**7.34**	**11.4**	1.96	1.56	**5.77**	**5.63**	2.68	1.0 U	1.0 U	1.0 U		2.57	1.0 U		1.0 U	**32.8**	1.36	1.89		2.18	**10.8**	4.5	**8.54**	1.84	**5.47**
Mar-10	1.18	**9.67**	1.47 UB	**5.89**	**11.4**	1.13 UB	1.68 UB	2.13	4.15	2.81	3.60		1.0 UB		**24.9**	2.21	1.0 UB	1.0 UB	**15.6**	1.0 U	2.87		1.34	**11.0**	3.16	**6.81**	1.87	**24.5**
Oct-10	2.64	4.03	3.11	**8.52**	**20.9**	1.0 U	1.59	**9.99**	**5.45**	3.87	1.0 U	1.0 U	1.60		1.0 U	1.0 U		1.0 U	**23.6**	1.73	**8.20**	2.16	1.0 U	**12.3**	**6.95**	4.64	3.96	**40.3**
Feb-11	1.59	**5.40**	1.67	**8.93 UJ**	**21.9 UJ**	1.0 UJ	2.84 UJ	4.48 UJ	2.47 UJ	3.47	1.12	1.39 UJ	2.49 UJ		**21.6 UJ**	1.0 UJ	1.0 UJ	1.88	**5.66**	1.56	4.00 UJ	2.63 UJ		**11.0**	4.16	4.74	1.87	**28.8**
Sep-11	1.0 U	1.20	2.51	**6.28**	**13.9**	1.0 U	1.0 U	3.29	2.39	2.75	1.00	1.0 U	1.0 U		2.28	1.0 U		1.07	**20.7**	1.21	1.0 U	1.04		**6.18**	3.27			**25.0**
Mar-12	1.01	4.57	2.65	**9.12**	**13.8**	1.0 U	2.03	3.34	1.40	3.20	1.0 U	1.0 U	1.57		3.39	1.0 U	1.0 U	1.0 U	**17.3**	1.0 U	1.0 U	1.0 U		**8.26**	2.32	1.88	1.0 U	**20.3**
Sep-12	1.01	2.99	4.81	**7.07**	**10.2**	1.04	1.60	1.52	1.95	2.59	4.01	1.0 U	1.0 U		**14.8**	1.0 U	1.0 U	2.12	**11.9**	1.0 U	2.35	1.0 U		**10.0**	1.33	3.39	1.28	**22.8**
Apr-13	1.0 U		1.03	**7.67**	**15.8**	1.44	2.21	1.64	3.30	2.59	1.0 U		1.0 U		1.0 U	2.05	1.0 U	1.0 U	**11.6**	1.0 U	2.35	1.0 U		**11.2**	3.37	4.45		**22.1**
GWETS PLACED OUT OF SERVICE																												
Oct-13	1.0 U		1.60	**6.53**	**7.85**	1.0 U	1.42	2.30	3.22	2.23	1.0 U		1.0 U		1.0 U	3.12	1.0 U	1.0 U	1.0 U	1.0 U	2.22	1.0 U		**6.31**	1.0 U	3.69	1.0 U	1.01
May-14	1.0 U	**7.0**	1.0 U	**6.4**	**7.6**	1.0 U	1.7	1.6	4.2	2.20	1.0 U		1.0 U		**5.1**	1.3	1.0 U	2.2	1.0 U	1.0 U	1.0 U	1.0 U		4.80	1.0 U	2.2	1.0 U	1.7
Oct-14	1.0 U	1.0 U	1.1	**9.3**	**11.2**	1.0 U	2.1	1.7	4.1	1.6	1.0 U		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	3.2	1.0 U	1.3	1.0 U		**10.5**	1.0 U	3.2	1.0 U	3.3
Apr-15	1.0 U	**5.8**	1.0 U	**9.3**	**9.3**	1.0 U	1.3	2.7	3.3	1.8	1.0 U		1.0 U		2.8	1.0 U	1.0 U	1.0 U	1.7	1.0 U	1.8	1.0 U		**11.1**	1.0 U	1.0 U	1.5	**52.0**
Sep-15	1.0 U		1.0 U	**8.3**	**8.3**	1.0 U	1.5	2.6	3.2	2.3	1.0 U		1.0 U		3.0	2.0	1.0 U	**18.4**	**14.2**	1.6	1.0 U			3.1	1.0 U	1.0 U	1.0 U	**61.6**
GWETS COMMENCED OPERATION (RW-2, RW-4, RW-5 PUMPING)																												
Apr-16	1.0 U	**6.1**	1.0 U	**13.5**	**9.8**	1.0 U	1.6	**8.2**	**6.1**	4.1	2.7		1.0 U		3.2	2.1	1.0 U	1.0 U	**15.5**	1.0 U	3.5			**7.8**	4.3	1.0 U	3.6	**26.9**
Oct-16	1.0 U	3.5	1.3	**6.1**	**7.2**	3.1	1.2	**7.3**	**5.9**	1.8	1.0 U		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	**13.4**	1.0 U	4.5			1.0 U	3.8	1.0 U	4.1	**19.3**
May-17	1.0 U	**6.3**	1.0 U	**7.8**	**5.8**	1.4	1.0 U	4.4	3.8	1.5	1.0 U		1.0 U		2.1	1.0 U	1.0 U	1.0 U	**17.0**	1.0 U	4.5			1.0 U	3.2	1.0 U	3.0	**15.1**
Nov-17	1.0 U	3.1	1.0 U	**9.4**	**7.5**	1.0 U	1.0	**5.1**	2.2	1.0	1.0 U		1.0 U		3.1	1.0 U	1.0 U	1.0 U	**10.5**	1.0 U	3.5	1.7		1.3	4.4	1.7	3.2	**16.8**

Notes
GWPW: Groundwater Production Well.
Units in µg/L (micrograms per liter).
Results from United States Environmental Protection Agency (USEPA) Method 8260 analysis.
Wells not included in this table have exhibited historical PCE concentrations less than 1 µg/L.
Bold values exceed Ground Water Cleanup Criteria (GWCC).
J: The compound was positively identified; however, the associated numerical value is an estimated concentration only.
U: The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
E: The sample concentration is above the linear calibrated range of the analysis.
UB: Compound considered non-detect at the listed value due to associated blank contamination.
UJ: The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
* October 1996 results are the average of analysis results from Associated Lab and Data Chem Lab in AGES Results of a Ground-Water Sampling Program 2/7/97.

Table 7
Historical Groundwater Haloether 508 Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Location	Groundwater Monitor Wells															Groundwater Extraction Wells			
	AN-1	FMW-3-90	FMW-4-20	FMW-4-90	FMW-5-90	FMW-6-90	MW-4-90	MW-5-90	MW-6-90	MW-17-90	MW-19-90	OW-1	PCMW-5	USGS-TW-A1	USGS-TW-A2	RW-2	RW-3	RW-4	RW-5
Date																			
May-93	20 U													10 U					
Feb-98	**8200 J**	**93 J**	**510 J**	**110 J**	**480 J**														
Jul-98																			
Sep-98														**330 J**					
Oct-98	**1200 J**	**460 J**	**75 J**	46 J	**380 J**		18 J		**88 J**										
GWETS COMMENCED OPERATION (RW-1, RW-2, RW-3, RW-4 PUMPING)																			
Jul-99	**430 J**	**330 J**	**280 J**	**84 J**	**150 J**									**130 J**		**300 J**	**160 J**	**150 J**	
Jan-00		**530 J**	**150 J**	**97 J**	**480 J**	6.2 J													
Feb-00	**150 J**							**200 J**	**70 J**					**59 J**	12 J	**390 J**	**130 J**	**190 J**	
Mar-00										**360 J**									
Apr-00										**390 J**									
Jun-00										**400 J**									
Jul-00	**1600 J**	**170 J**	**110 J**	**180 J**	**1300 J**	7.6 J							**1700 J**	**59 J**		**200 J**	**170 J**	**110 J**	
Aug-00																			
Oct-00										**260 J**									
Dec-00										**240 J**									
Feb-01		**170**	22	30	**590**	2.9 J	29		25					45				42	
Mar-01	**520E**							**210**		**140**			**730 E**			**76**	**140**		
May-01										**120**									
Jun-01										**140**									
Aug-01		**91**	1.9 J	37	**630 E**		16	**83**	38	**140**						**79**	44	**63**	
Sep-01	**500**					2.1 J													
Nov-01										**74**									
Feb-02	**530 E**	**210 E**	8.1	**67**	**440 E**	24	48	**150**	**110**	4.4 J			**840**	**100**		**190**	21	**170**	
Sep-02	**2220**	**68.4 E**	2.0 U	**91.2**	**1440 E**	16	43.8	**96**	**166**	2.0 U				**124 E**		**258 E**	14.5	**193 E**	
Mar-03	**960**	**149**	3.5	41.6	**775**	33	**88**	41.8	**67**	1.3			**302**	**100 J**		**167**	5.8	**100 J**	
Sep-03	**840**	**298**	1.8	35.5	**934**	37.5	**130**	**114**	**176**	1.6		**1580**	**285**	**106**		**145**	6.5	47.4	
Mar-04	**672**	**444**	6.35	**64.7**	**528**	43.2	**195**	1 U	**163**	2.45		1 U	**3720**	**96.1**		40.5	12.8	34.1	
Jun-04													**497**						
Sep-04	**52.5**	**157**	11.6	**76.1**	**255**	46.3	36.8	**88.2**	**54.8**	1.95	1.0 U	**224**	**168**	**76.6**		**178**	11.1	**108**	

Table 7
Historical Groundwater Haloether 508 Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Location	Groundwater Monitor Wells															Groundwater Extraction Wells			
	AN-1	FMW-3-90	FMW-4-20	FMW-4-90	FMW-5-90	FMW-6-90	MW-4-90	MW-5-90	MW-6-90	MW-17-90	MW-19-90	OW-1	PCMW-5	USGS-TW-A1	USGS-TW-A2	RW-2	RW-3	RW-4	RW-5
Date																			
RW-5 COMMENCED PUMPING																			
Feb-05	**289 J**	**176**	**80.2 J**	**57.1 J**	**373 J**	1.31	**76.5**	30.3 J	41.2		**80.6**	**164**	**102**	**59.2**		**74.0**	8.54	**87.0**	**158**
Sep-05	**485**	**93.5**	37.0	**59.0**	**341**	23.3	40.1	33.7	**57.8**	1.0 U	5.49	**368**	47.8	**72.7**		**82.2**	5.98	**78.8**	**138**
Mar-06	**141**	**89.8**	12.5	23.4	**158**	25.4	28.9	10.8 J	40.2	1.0 U	2.73	45.0	45.8	43.3	**63.0**	**69.4**	12.1	45.5	
Sep-06	**238**	**120**	11.2	35.9	**295 D**	3.11	21.1	1.0 U	19.2	1.0 U	33.7	**135**	44.9 J	36.9		21.6	9.42	43.0	
Mar-07	**51.3**	**115**	22.2	33.8	**82.0**	1.06	**66.6**	1.0 U	42.3	1.62	16.2	**66.6**	**112**	**56.9**	6.71	47.6	20.4	39.1	
Sep-07	**777 D**	**135**	**66.5**	**60.0**	**224 D**	**61.8**	**83.0**	**65.2**	**58.0**	1.63	24 J	1.0 U	**92.5**	**146**	11.4	**83.8**	18.7	48.6	1.64
Mar-08	**398 D**	**68.7**	22.6	43.9	**243 D**	6.65	**58.1**	48.0	49.4	**112**	6.42	**197 J**	23.7	**59.0**	8.80	**57.2**	7.80 J	**52.3**	**86.2**
Sep-08	2.70	**93.0**	1.0 U	40.0	**235 D**	11.1 J	42.6	1.0 U	43.8	9.75	13.2	**173**	18.0	**112.0**	39.8	**61.1**	**53.6**	14.2	
Mar-09	**605 DJ**	**219 D**	**62.0**	48.6	**241 D**	32.5		**311 D**	**340**	8.88 J	3.66	**148 J**	38.9 J	**132.0**		**177 DJ**	31.6	**100**	**155 D**
Sep-09	**247 D**	**79.3**	19.3	19.4	**226 D**	4.76	**86.7**	3.55	**54.5**	4.55	1.53	**224 D**	27.5	**88.3**		**82.6**	10.7	**54.8**	41.8
Mar-10	**424**	**134**	10.4	20.3	**176**	**52.7**	**67.1**	**69.1**	**50.1**	7.04	6.38	**66.0**	**50.6**	**98.2**		**53.0**	9.70	**59.2**	**98.5**
Oct-10	33.2	**157**	3.50	19.7	**209**	**78.4**	**50.4**	1.0 U	**115**	1.0 U	1.0 U	**91.3**	15.1	42.3	27.7	**87.5**	2.72	**95.0**	**94.2**
Feb-11	45.8	**148**	5.74	46.6	**138**	48.9 UJ	23.7	9.63 UJ	**59.5 UJ**	1.0 U	9.46	41.2	11.8	33.5	**57.1**	48.1	10.8	47.1	**77.4**
Sep-11	9.88	**93.0**	2.48	18.0	**114**	35.0	22.6	9.19	18.0	1.0 U	1.0 U	**85.8**	22.0	23.0	28.2	41.9			**76.8**
Mar-12	**63.2**	**99.7**	1.71	37.2	**82.5**	38.5	34.4	1.56	18.6	1.0 U	16.8	29.4	14.2	21.9	16.6	34.4	10.1	22.7	**60.8**
Sep-12	**370 D**	**73.0**	6.41	27.1	**67.0**	4.57	33.7	41.3	29.9	1.0 U	8.93	**279 D**	15.1	**129.0**	4.75	20.3	4.61	33.5	**78.4**
Apr-13	**318 D**	**99.6**	18.0	26.8	**154.0**	1.28	33.7	3.22	24.4	1.20	1.0 U	**58.4**	15.2	**98.9**	3.04	**96.9**	14.6		**66.2**
GWETS PLACED OUT OF SERVICE																			
Oct-13	**54.9**	47.0	4.62	27.5	**174**	1.0 U	8.10	1.0 U	**57.7**	1.0 U	1.0 U	**189**	2.66	**85.0**	21.6	4.38	5.51	11.0	**268 D**
May-14	**281 D**	**50.2**	25.0	44.4	**76.7**	1.0 U	44.4	1.0 U	**59.8**	13.9	45.0	**59.3**	11.7	44.7	11.9	1.6	6.4	17.7	26.4
Oct-14	**319 D**	**84.8**	35.4	**52.9**	**66.5**	1.0	**208 D**	1.0 U	**55.0**	1.2	1.5	**286 D**	7.3	**109**	40.9	2.0	4.6	**77.4**	**76.7**
Apr-15	**310 D**	**66.1**	47.8	36.2	**75.8**	2.4	**133**	1.0 U	48.7	2.6	1.2	**65.7**	6.2	**98.6**	10.2	1.0 U	1.0 U	**107**	**244 D**
Sep-15	**272 D**	46.1	23.7	31.3	**46.9**	1.0 U	**86.5**	2.5	31.9	6.2	1.0 U	**133 J**	34.2	**102**		4.2	1.0 U	**59.0**	**173 D**
GWETS COMMENCED OPERATION (RW-2, RW-4, RW-5 PUMPING)																			
Apr-16	**130**	**57.8**	7.3	37.1	**160**	2.9	**84.4**	13.7	**58.1**	4.6	39.0	**301 D**	14.5	**71.8**		**57.3**	1.0 U	47.9	**86.5 J**
Oct-16	**106**	**50.7**	30.4	25.5	**146**	2.5	43.1	1.8	40.6	1.0 U	1.0 U	**239 D**	1.7	39.7		49.4	1.0 U	37.8	**89.6**
May-17	**232 D**	31.9	8.6	17.0	**88.1**	13.0	20.3	6.8	25.2	1.0 U	1.0 U	**372 D**	1.0 U	2.9		43.8	1.0 U	36.8	**76.5**
Nov-17	1.0 U	40.0	6.3	15.4	**97.3**	4.1	5.0	3.4	5.1	1.0 U	1.0 U	47.8	6.9	7.4	2.7	33.9	1.0 U	31.9	**58.3**

Notes
Units in µg/L (micrograms per liter).
Results from United States Environmental Protection Agency (USEPA) Method 8260 analysis.
Wells not included in this table have exhibited historical haloether 508 concentrations less than 50 µg/L.
Bold values exceed Gorund Water Cleanup Criteria (GWCC).
J: The compound was positively identified; however, the associated numerical value is an estimated concentration only.
U: The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
UJ: The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
E: The sample concentration is above the linear calibrated range of the analysis.
D: The analysis was performed at a dilution due to the high analyte concentration.

Table 8
Historical Groundwater Isoflurane Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Location	Groundwater Monitor Wells																			Groundwater Extraction Wells		
	AN-2	FMW-2-90	FMW-3-90	FMW-4-20	FMW-4-90	FMW-5-90	FMW-6-90	MW-10-50	MW-10-90	MW-11-20	MW-17-90	MW-19-90	MW-4-90	MW-5-90	MW-6-90	MW-7-20	MW-2	PCMW-5	USGS-TW-A1	RW-2	RW-4	RW-5
Date																						
May-90	305.9								10 U										48.6/48			
May-96	230 D								770 D				460 D					180 D				
Jun-96																			85			
Oct-96*	214								901	1347			808.5	125.5	770	661.5		505				
Feb-98	640 J	31 J	31 J	96 J	84 J	180 J	18 J		3700 J	3300 J	34 J	490 J	1400 J		470 J	1100 J		660 J				
Jul-98									680 J													
Sep-98																			180 J			
Oct-98	9.4 J	13 J	140 J	30 J	34 J	150 J	11 J		14 J	760 J	9.8 J	27 J	820 J		49 J	160 J		1200 J				
May-99									760 J	690 J	460 J											
GWETS COMMENCED OPERATION (RW-1, RW-2, RW-3, RW-4 PUMPING)																						
Jun-99																						
Jul-99	130 J	31 J	49 J	78 J	58 J	160 J			220 J	210 J	230 J	220 J	200 J	120 J	420 J			330 J	91 J	220 J	84 J	
Oct-99										350 J		270 J										
Dec-99									570 J		86 J											
Jan-00		70 J	180 J	44 J	47 J	37 J	10 J															
Feb-00	510 J								270 J	140 J	53 J	92 J	70 J	170 J	140 J	770 J		270 J	57 J	310 J	120 J	
Mar-00								310 J	340 J		160 J											
Apr-00									240 J	320 J	210 J	210 J										
May-00								230 J	240 J		180 J											
Jun-00								220 J	200 J		200 J											
Jul-00	330 J	17 J	110 J	25 J	66 J	200 J	15 J		160 J	360 J	170 J	130 J	170 J	180 J	350 J			630 J	52 J	190 J	95 J	
Aug-00									200 J		160 J											
Sep-00								110 J	100 J		74 J											
Oct-00								120 J	110 J		110 J											
Nov-00										310 J		61 J										
Dec-00								98 J	100 J		94 J											
Feb-01		46	80	9.7	16	130	4.9J					68	57		210				46		48	
Mar-01									43	200	74			330				410 E		120		
May-01								56	56		63											
Jun-01								59	54		77											
Aug-01		22	47	1.3 J	23	46			58	74	72	41	100	160	180			370		120	73	
Sep-01							8.2															
Nov-01								88	93		40											
Feb-02		41	86		30	45	24		52	120	28	92	70	210 E	180			550	53	150	89	
Sep-02		49.4	23.9	2U	33.6	50 U	14.6		76.6 E	168	7.2	89.5	68.7	106 E	99.4				61.9 E	166 E	75.8 E	
Mar-03		64.8	100 J	3.1	27	57.7	34.3		200 J	56.6	6.7		62.2	62.4	200 J			348		127	100 J	
Sep-03		41	83.4	1.9	16.7	42.3	28.9		20.1	69.80 E	7.7	34.2	87.8	118	308		134	220	50	130	38.5	
Mar-04	1.0 U	72.6	152	69.4	84.6	40.1	39.8		63	146	24.4	36.3	113	1.0 U	299	52.8 E	52.1	1740	74.9	58.6	16.9	
Jun-04	10.4																	391				
Sep-04	1.96	20.6	80	18.5	78.5	44.3	34.5		6.81	34	6.91	1.0 U	48.1	106	122	18	46.2	124	50.4	152	76.1	

Table 8
Historical Groundwater Isoflurane Concentrations
Second Semi-annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site
Guayama, Puerto Rico

Location	Groundwater Monitor Wells																			Groundwater Extraction Wells		
	AN-2	FMW-2-90	FMW-3-90	FMW-4-20	FMW-4-90	FMW-5-90	FMW-6-90	MW-10-50	MW-10-90	MW-11-20	MW-17-90	MW-19-90	MW-4-90	MW-5-90	MW-6-90	MW-7-20	MW-2	PCMW-5	USGS-TW-A1	RW-2	RW-4	RW-5
Date																						
RW-5 COMMENCED PUMPING																						
Feb-05	6.08	46.4	**84.5**	**83.6**	**63.5**	42.8	1.0 U			35.0		**70.2**	38.5	**65.9**	**189**	**85.8**	**132**	**111**	42.9	**173**	**72**	**92.7**
Sep-05	1.74	45.7	38.3	36.8	**54.8**	35.3	21.9		5.41	36.2	5.43	5.45	23.2	**79.5**	**88.8**	**90.6**	**129**	49.5	**50.5**	**136**	**66.2**	**87.5**
Mar-06	**94.9**	6.52	36.2	17.1	28.6	15.7	26.6		5.72	48.6 J	5.96	3.96	13.2	24.1	**216**	**110**	35.0	28.7	22.4	**96.6**	45.7	
Sep-06	23.7	47.3	39.7	12.3	33.9	**64.2**	3.15		6.07	31.5	3.45	36.4	14.4	1.0 U	**97.7**	**60.3**	**80.8**	40.3 J	23.7	38.7	43.7	
Mar-07	32.8	47.6	35.4	37.3	28.4	19.3	4.11		1.0 U	17.2	4.36	9.87	14.2	4.4 J	**153**	48.4	**72.8**	**106**	34.5	**67.1**	45.0	
Sep-07	31.3	**52.8**	38.3	**60.8**	38.4	27.1	45.0			16.0	6.83	10.1	17.8	**147**	**217 D**		**58.6**	**100**	**76.4**	**80.2**	40.7	1.85
Mar-08	15.4	40.2	23.7	26.0	30.2	16.6	6.48			**59.8**	22.1	3.13	30.8	**96.5**	**126**		**59.3**	30.5	38.6	**74.8**	32.5	**71.4**
Sep-08	3.59 J	46.7	30.7	4.2	29.5	21.8	7.79			20.7 J	5.51 J	9.66 J	25.4 J	13.8	**148 J**	18.0 J	21.5	13.2 J	**57.8**	**78.9**	9.05	
Mar-09	35.2 J	37.0	42.2 J	**63.4**	34.7	13.3 J	16.9 J			18.1 J	5.35 J	3.02	**302 D**	21.6	**1660 DJ**	**61.5**	**61.4**	23.9 J	46.8J	**187 D**	**65.8**	**104 D**
Sep-09	15.8	42.4	25.0	**22.7**	41.3	28.9	6.47			6.30	2.92	2.92	**186**	27.6	**422 D**	20.6	**111**	**51.1**	**61.1**	**184 D**	**72.7**	**77.5**
Mar-10	19.2	48.3	37.2	9.91	28.6	1.0 U	42.4			8.39	2.50	11.1	**111**	**293**	**324 EJ**		**132**	**166**	28.3	**155**	**69.8**	**156**
Oct-10	15.4	39.7	45.9	12.9	20.2	22.1	**60.5**			12.8	1.0 U	1.0 U	**78.3**	1.0 U	**148**	20.1	44.5	15.3	15.8	**178**	**82.8**	**128**
Feb-11	**78.2**	39.5	39.1	19.8	**65.4**	16.8 UJ	40.1			7.66	1.0 U	9.3	25.2	27.1	**158 UJ**	**72.9**	14.0	**69.0**	13.0	**124**	**74.0**	**144**
Sep-11	33.2	30.9	25.1	6.48	30.2	18.3	32.0			1.0 U	1.0 U	1.0 U	21.7	39.2	**95.4**	43.4	8.92	20.3	10.6	**85.5**		**83.5**
Mar-12	**197**	**50.0**	28.7	6.50	**61.4**	13.6	35.5			6.50	1.0 U	15.7	19.4	7.97	**152**	**50.6**	**117**	17.1	20.6	**119**	39.2	**105**
Sep-12	**82.4**	41.2	22.6	19.8	**53.3**	15.4	8.29			9.00	1.0 U	6.65	9.67	**198**	**289 D**	26.1	**79.4**	42.9	**94.5**	**133**	**62.2**	**109**
Apr-13	**58.7**	39.0	30.4	26.6	7.30	14.3	4.34			7.35	1.0 U	1.0 U	7.3	25.9	**96.3**		**262 D**	27.9	**62.6**	**400 D**		**142**
GWETS PLACED OUT OF SERVICE																						
Oct-13	1.42	36.7	15.4	10.5	38.1	46.8	1.78			**350 D1:10**	1.0 U	1.0 U	5.46	1.0 U	**71.6**		**450 D1:5**	4.74	48.6	32.2	**54.6**	18.1
May-14	20.8	37.2	15.9	**299 D**	**199**	79.3	2.6			**59.0**	1.3	10.1	22.5	3.6	**130**		**298 D**	20.9	29.2	14.0	13.4	8.0
Oct-14	1.4	**52.7**	25.4	**449 D**	**255 D**	**166 D**	2.4			15.8	1.0 U	1.0 U	33.3	1.0 U	46.1		**212 D**	13.5	39.0	9.2	40.9	16.1
Apr-15	5.7	**60.0**	22.3	**750 D**	**319 D**	**245 D**	3.0			24.9	1.0 U	1.0 U	24.5	1.1	**64.9**		**92.0**	14.7	42.7	5.4	32.3	36.2
Sep-15	4.1	**52.5**	17.1	**412 D**	**279 D**	**166**	1.6			14.7	1.0 U	1.0 U	18.6	23.1	30.4		**150.0**	**59.8**	22.2	35.1	13.9	40.1
GWETS COMMENCED OPERATION (RW-2, RW-4, RW-5 PUMPING)																						
Apr-16	1.0 U	**67.5**	20.0	**170 J**	**279 D**	39.5	3.1			4.0	1.0 U	13.8	17.3	28.8	**62.0**		29.0	13.3	47.5	**266**	**56.1**	**56.9 J**
Oct-16	1.0 U	49.9	17.9	**164 D**	**210 D**	19.2	3.4			2.3	1.0 U	1.0 U	17.1	12.1	40.0		16.5	3.2	27.0	**184**	**50.8**	**60.6**
May-17		**60.2**	11.8	**70.3**	**151**	12.9	13.8			2.6	1.0 U	1.0 U	11.1	15.6	30.5		18.6	1.0 U	1.5	**126**	**53.0**	**61.5**
Nov-17	7.1	**70.4**	12.7	**162**	**198**	8.5	10.6			1.0 U	1.0 U	1.0 U	7.3	8.5	2.7		2.8	1.8	4.5	**65.2**	21.5	32.8

Notes
Units in µg/L (micrograms per liter).
Results from United States Environmental Protection Agency (USEPA) Method 8260 analysis.
Wells not included in this table have exhibited historical isoflurane concentrations less than 50 µg/L.
Bold values exceed Ground Water Cleanup Criteria (GWCC).
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
UJ: The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
E: The sample concentration is above the linear calibrated range of the analysis.
D = The analysis was performed at a dilution due to the high analyte concentration.
D1:5 = The analysis was performed at a dilution (1:5) due to the high analyte concentration.
D1:10 = The analysis was performed at a dilution (1:10) due to the high analyte concentration.
* October 1996 results are the average of analysis results from Associated Lab and Data Chem Lab in AGES Results of a Ground-Water Sampling Program 2/7/97.

FIGURES

Acad Version : R20.1s (LMS Tech)
User Name : ekrahmer

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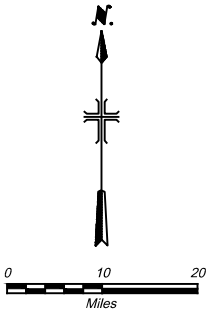
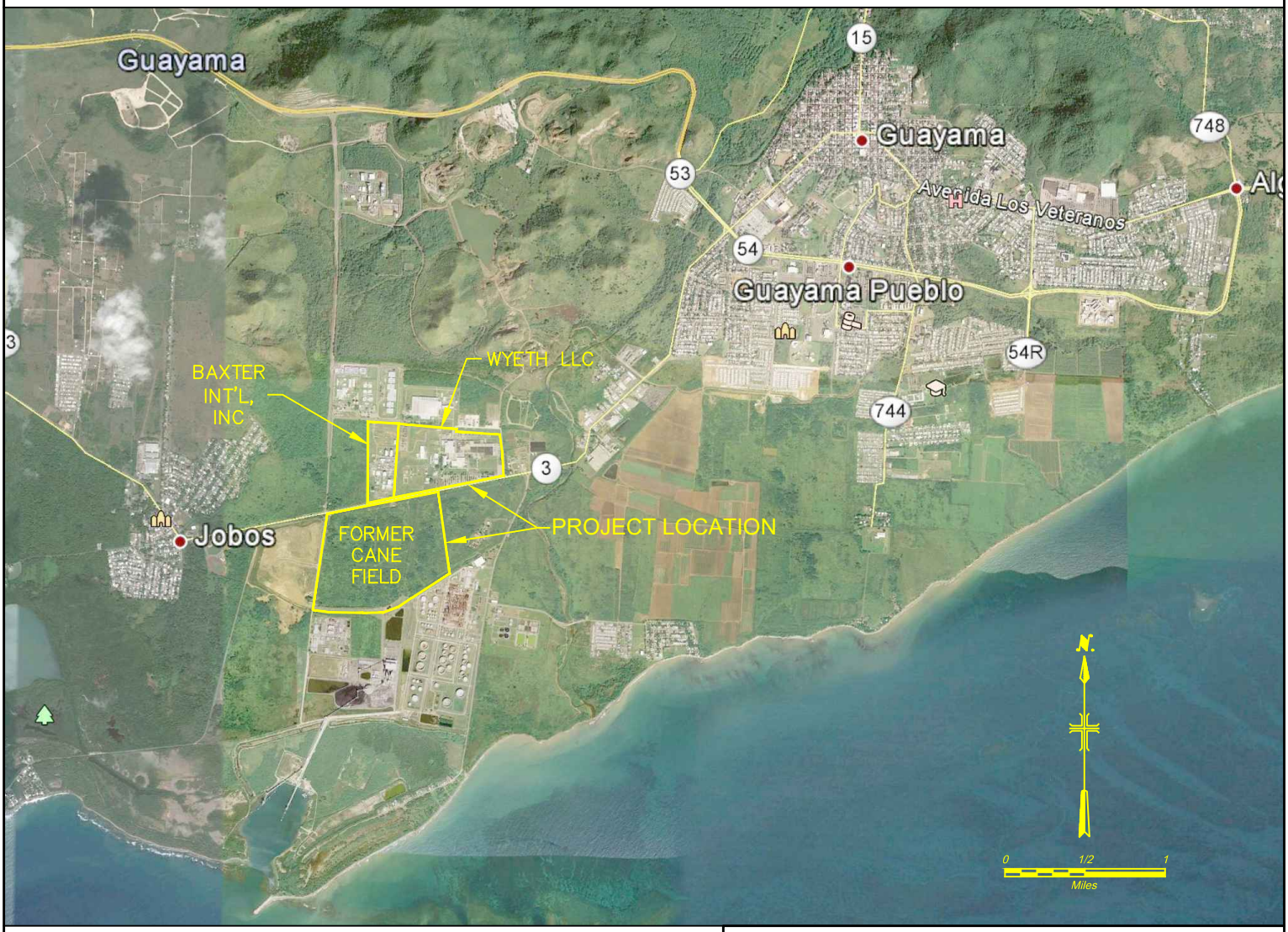




AERIAL PHOTOS COURTESY GOOGLE EARTH © 2014

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

SITE VICINITY MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

Acad Version : R20.1s (LMS Tech)
User Name : ekrahmer

Date\Time : Mon, 26 Mar 2018 - 9:21am
Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig02 Site Map-Full.dwg

LEGEND

- GROUNDWATER MONITOR WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL (CURRENTLY NOT IN USE)
- HYDRAULIC PROFILE TOOL (HPT) PROBE LOCATION (GW = GROUNDWATER SAMPLE)
- PR-3 PUERTO RICO HIGHWAY 3

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

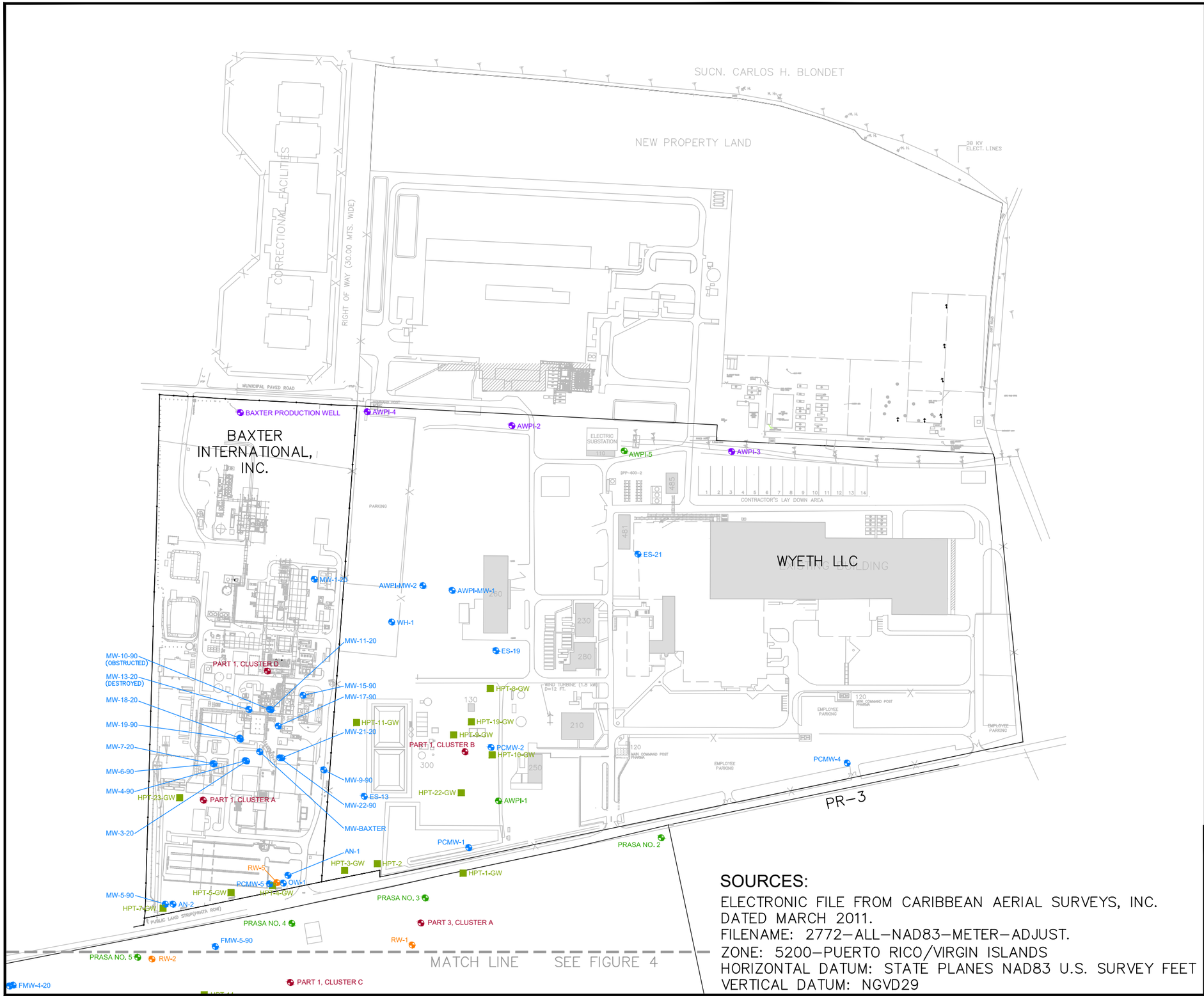
FIBERS SITE BOUNDARY

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2



LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL (CURRENTLY NOT IN USE)
- HPT-14 HYDRAULIC PROFILE TOOL (HPT) PROBE LOCATION
- HPT-20-GW HPT PROBE LOCATION WITH GROUNDWATER SAMPLE
- PR-3 PUERTO RICO HIGHWAY 3

0 400' 800'

GRAPHIC SCALE

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

SITE MAP (NORTH PORTION)

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FIGURE 3

Acad Version : R20.1s (LMS Tech) Date\Time : Tue, 20 Mar 2018 - 11:33am
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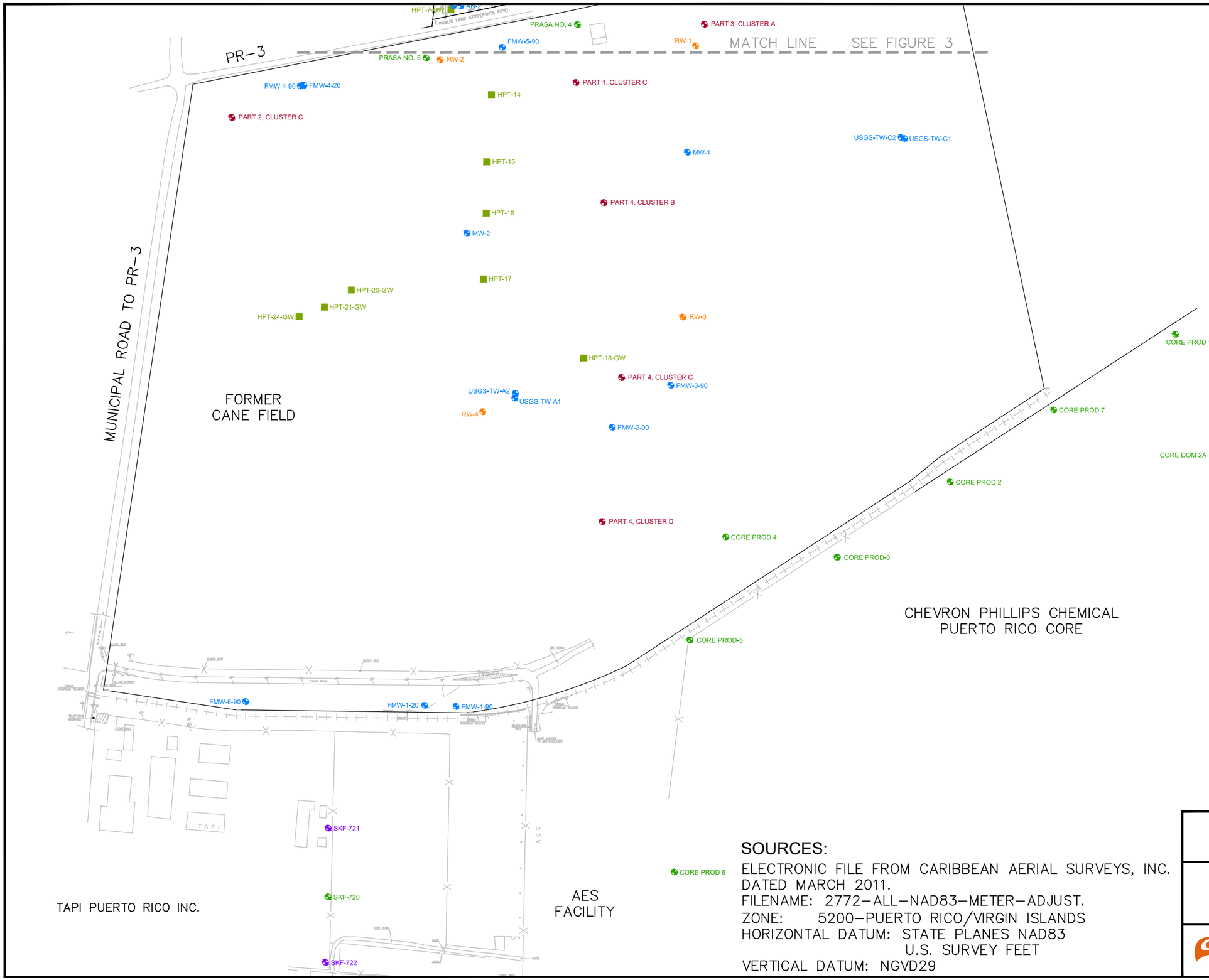

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL (CURRENTLY NOT IN USE)
- HPT-14 HYDRAULIC PROFILE TOOL (HPT) PROBE LOCATION
- HPT-20-GW HPT PROBE LOCATION WITH GROUNDWATER SAMPLE
- PR-3 PUERTO RICO HIGHWAY 3

0 400' 800'

GRAPHIC SCALE

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83
U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

SITE MAP (SOUTH PORTION)

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

Acad Version : R20.1s (LMS Tech) Date\Time : Tue, 20 Mar 2018 - 11:34am
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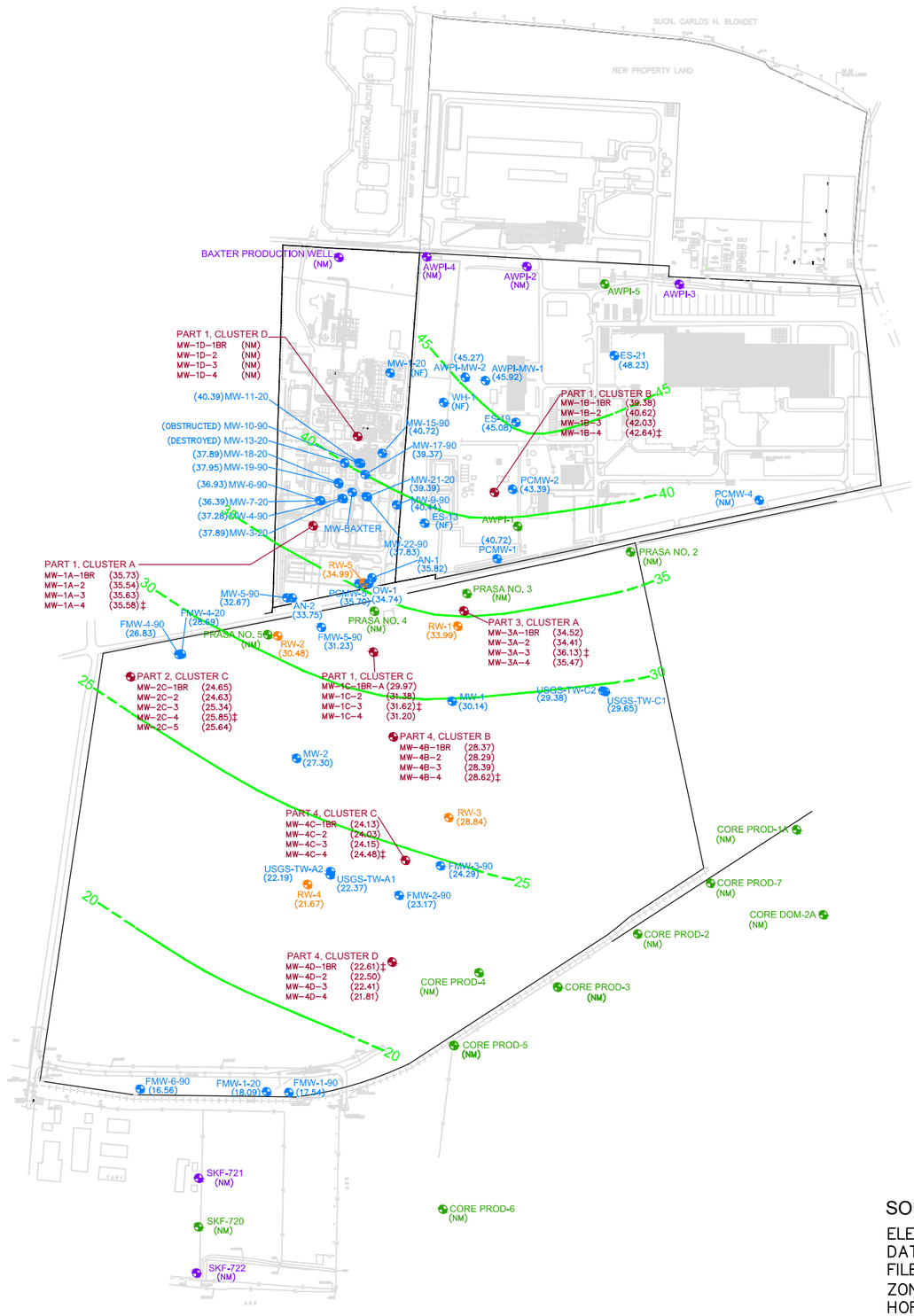

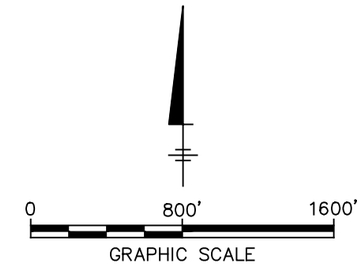

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- PRODUCTION WELL
- PRODUCTION WELL NOT IN USE
- 25 GROUNDWATER POTENTIOMETRIC SURFACE (DASHED WHERE INFERRED)
- (21.60) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- (NF) NOT FOUND
- (NM) NOT MEASURED
- (DRY) GROUNDWATER NOT ENCOUNTERED DURING MONITOR
- ‡ HIGHEST MEASURED GROUNDWATER ELEVATION USED FOR CONTOURING
- PR-3 PUERTO RICO HIGHWAY 3

NOTE: GROUNDWATER POTENTIOMETRIC SURFACE REPRESENTS GROUNDWATER ELEVATION ACROSS THE THREE HYDROSTRATIGRAPHIC UNITS (HSUs; COMPOSITE SYSTEM)

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

GROUNDWATER POTENTIOMETRIC SURFACE MAP (NOVEMBER 2017)

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FIGURE
5

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 - 9:14am
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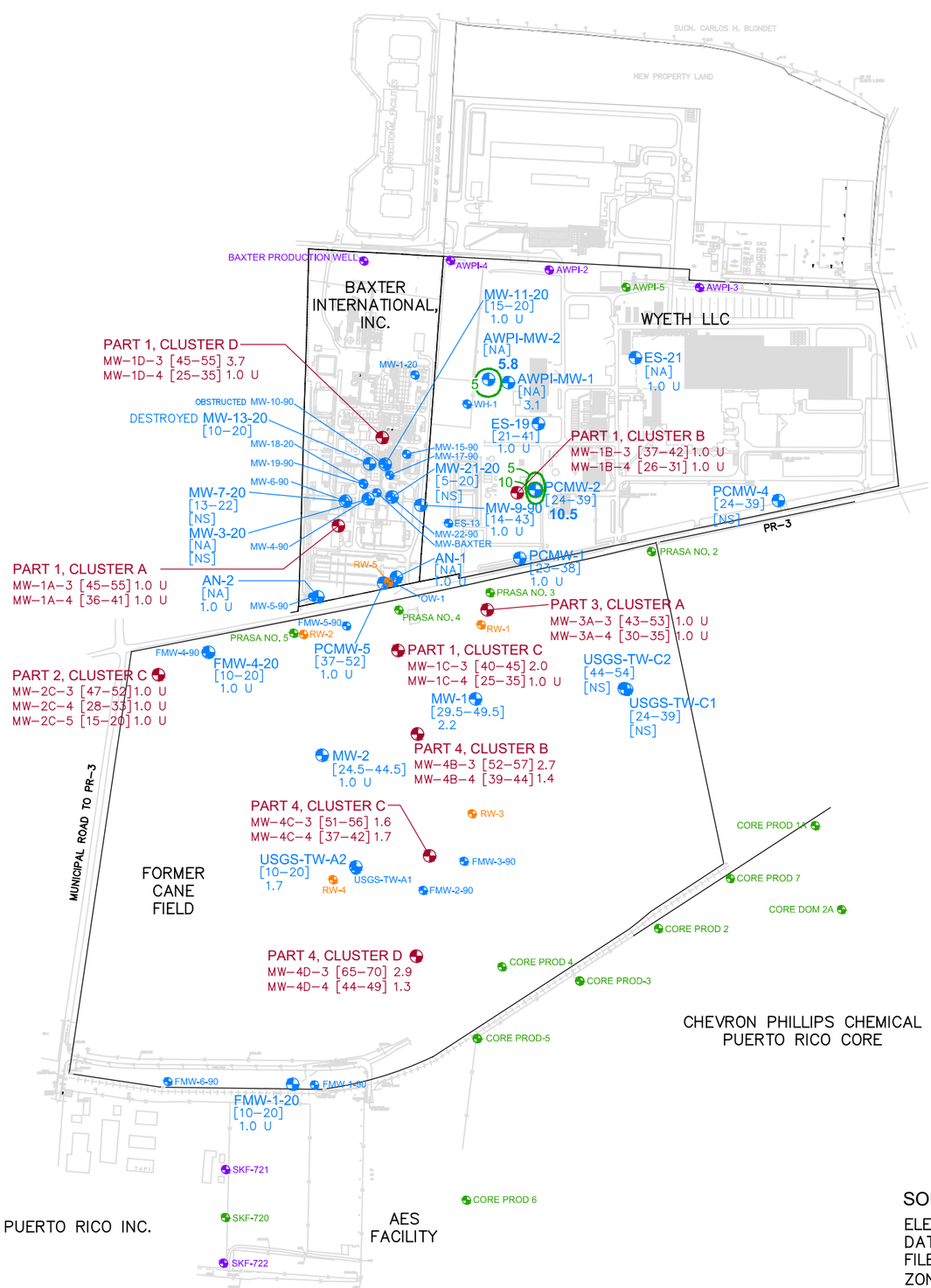

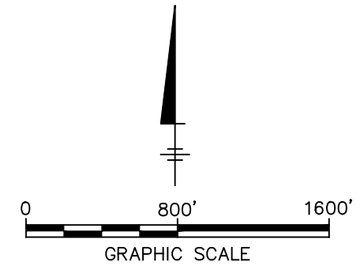

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 5 TETRACHLOROETHENE (PCE) ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 4.4 PCE GROUNDWATER CONCENTRATION (µg/L)
- **16.0** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTE:

1. WELLS AND DATA IN UPPER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TETRACHLOROETHENE (PCE) GROUNDWATER ISOPLETH MAP UPPER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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FIGURE 6

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:17am
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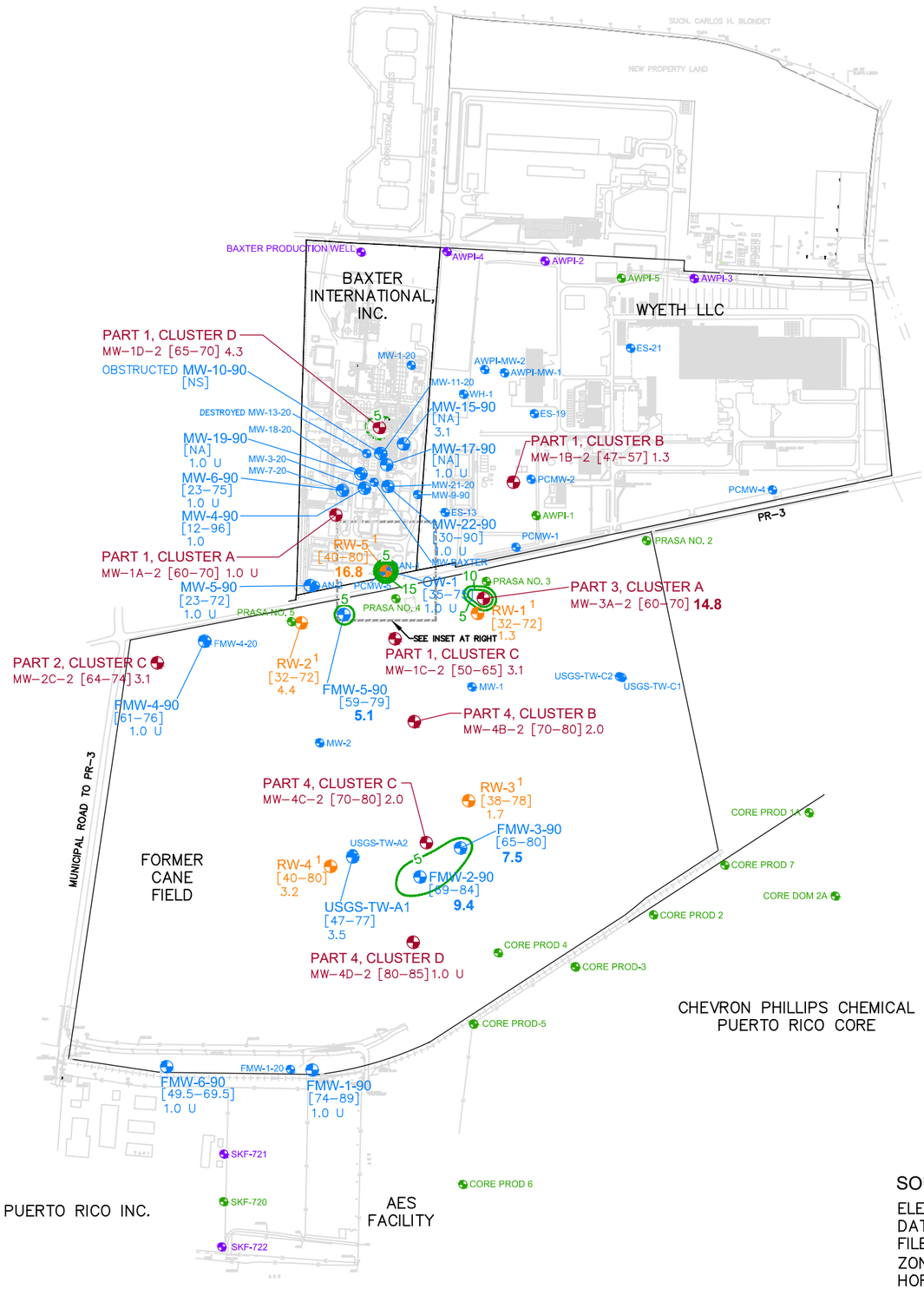

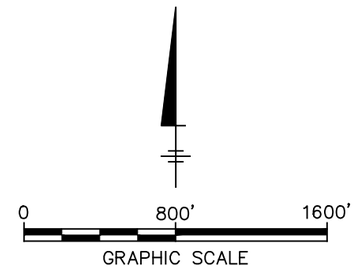

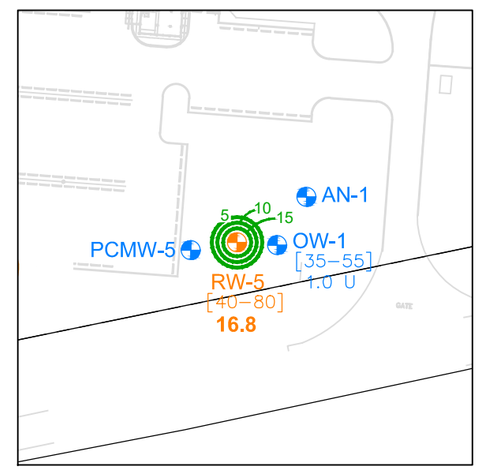

INSET
SCALE: 1"=200'

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 5 TETRACHLOROETHENE (PCE) ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- [51-56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 4.8 PCE GROUNDWATER CONCENTRATION (µg/L)
- **11.3** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR-3 PUERTO RICO HIGHWAY 3

NOTES:
1. [1] WELL NOT PURGED
2. WELLS AND DATA IN MIDDLE HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:
ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TETRACHLOROETHENE (PCE) GROUNDWATER ISOPLETH MAP MIDDLE HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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FIGURE 7

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 - 9:19am
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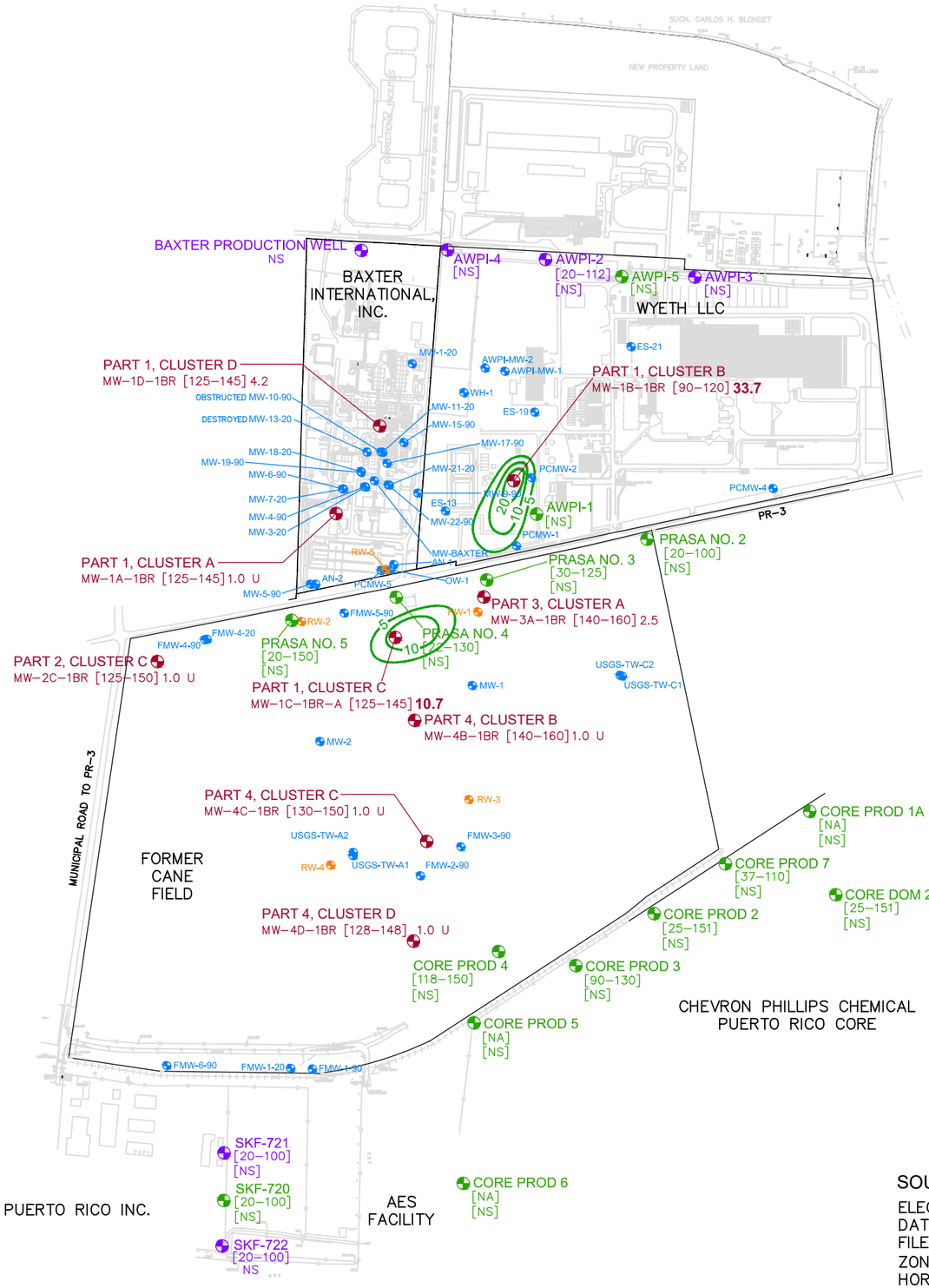

0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 5 TETRACHLOROETHENE (PCE) ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 2.8 PCE GROUNDWATER CONCENTRATION (µg/L)
- **37.0** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L
- **J** THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. WELLS AND DATA IN LOWER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TETRACHLOROETHENE (PCE) GROUNDWATER ISOPLETH MAP LOWER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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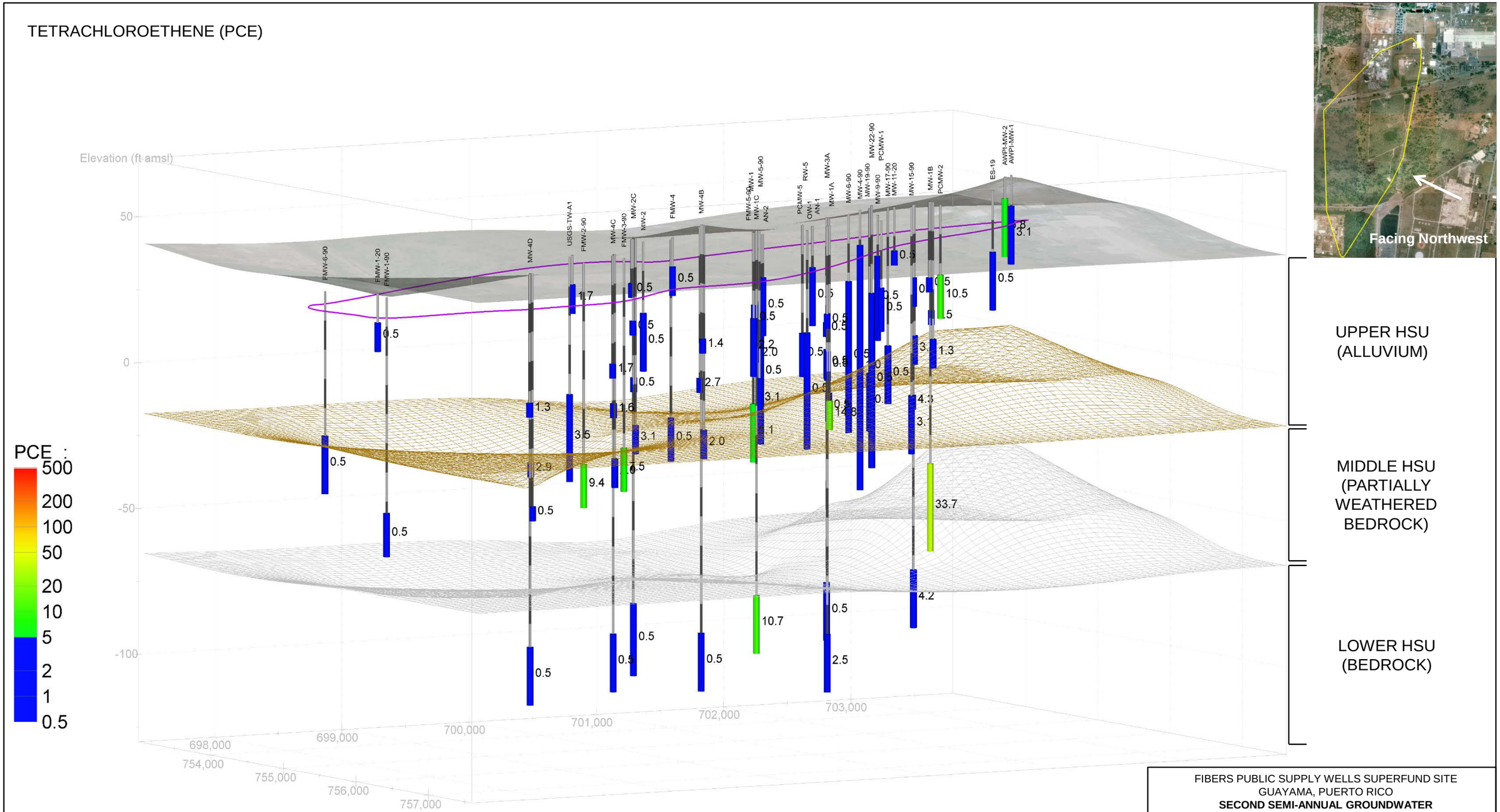
FIGURE
8

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:24am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig08 2SAR2017 PCE-Lower.dwg

TETRACHLOROETHENE (PCE)



Location

Well

Well Screen and Data Value

Groundwater surface

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

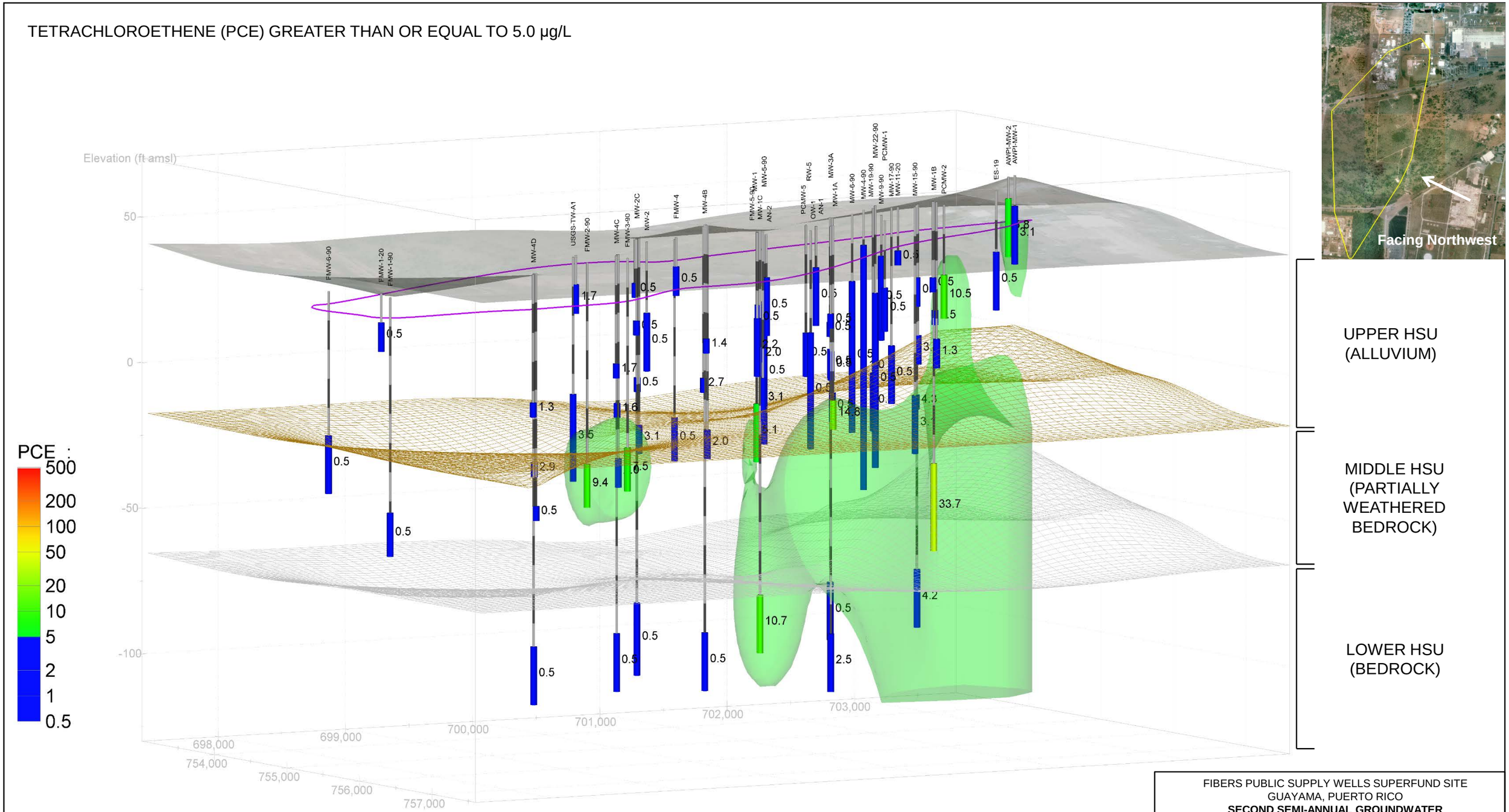
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TETRACHLOROETHENE (PCE) IN GROUNDWATER WELL LOCATIONS LOOKING NORTHWEST (NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE
9

TETRACHLOROETHENE (PCE) GREATER THAN OR EQUAL TO 5.0 µg/L



Location

Well

Well Screen and Data Value

Groundwater surface

3D plume hull of Tetrachloroethene (PCE) greater than or equal to 5.0 µg/L

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

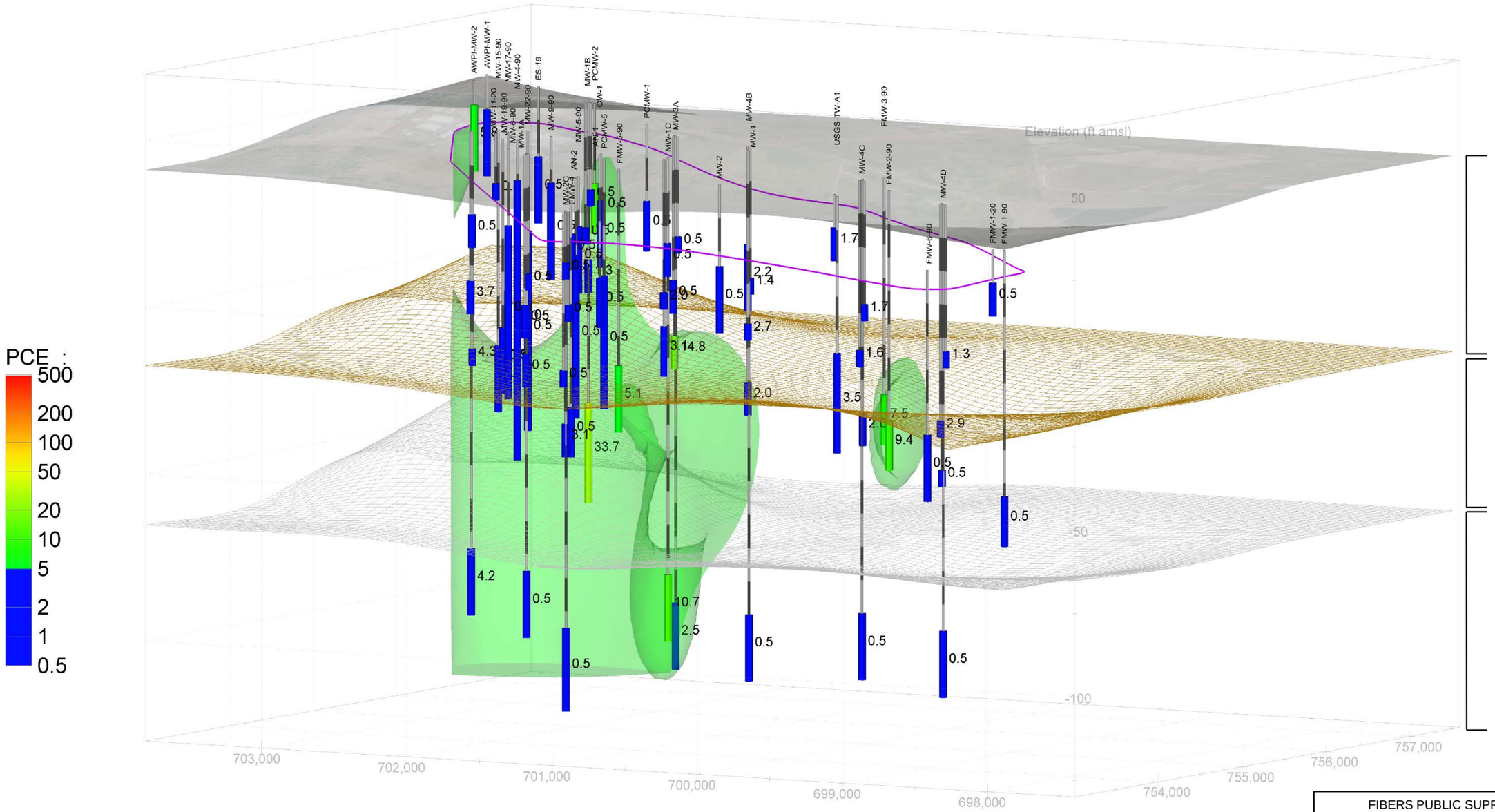
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TETRACHLOROETHENE (PCE) IN GROUNDWATER 3D PLUME LOOKING NORTHWEST (NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE **10**

TETRACHLOROETHENE (PCE) GREATER THAN OR EQUAL TO 5.0 µg/L



UPPER HSU (ALLUVIUM)

MIDDLE HSU (PARTIALLY WEATHERED BEDROCK)

LOWER HSU (BEDROCK)

SKF-722 Location

Well: Well Screen and Data Value (34.0)

Groundwater surface

3D plume hull of Tetrachloroethene (PCE) greater than or equal to 5.0 µg/L

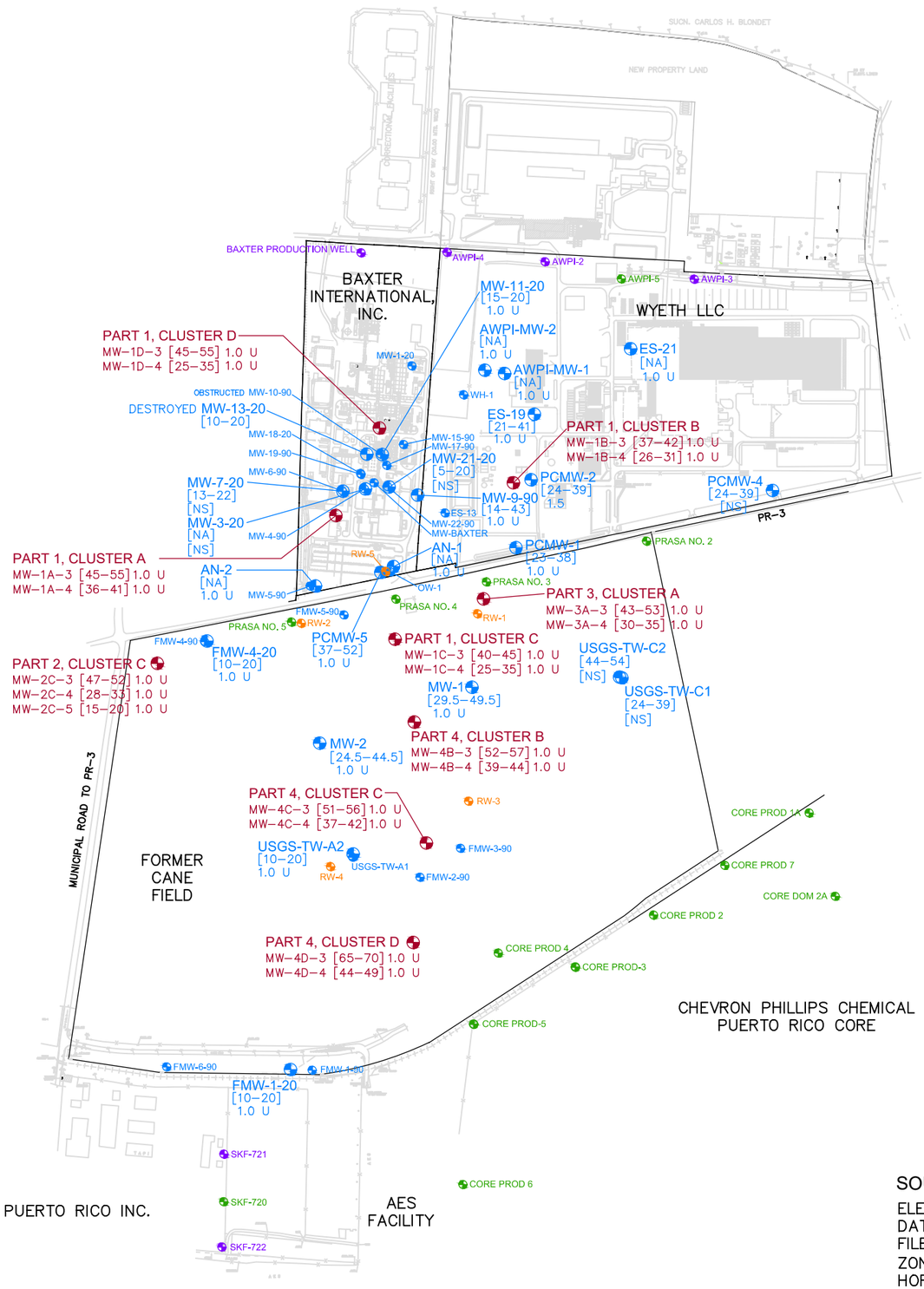
NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TETRACHLOROETHENE (PCE) IN GROUNDWATER 3D PLUME LOOKING NORTHEAST (NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE **11**



0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 1.8 TRICHLOROETHENE (TCE) GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. TCE WAS NOT DETECTED ABOVE THE GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L.
2. WELLS AND DATA IN UPPER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TRICHLOROETHENE (TCE) GROUNDWATER CONCENTRATION MAP UPPER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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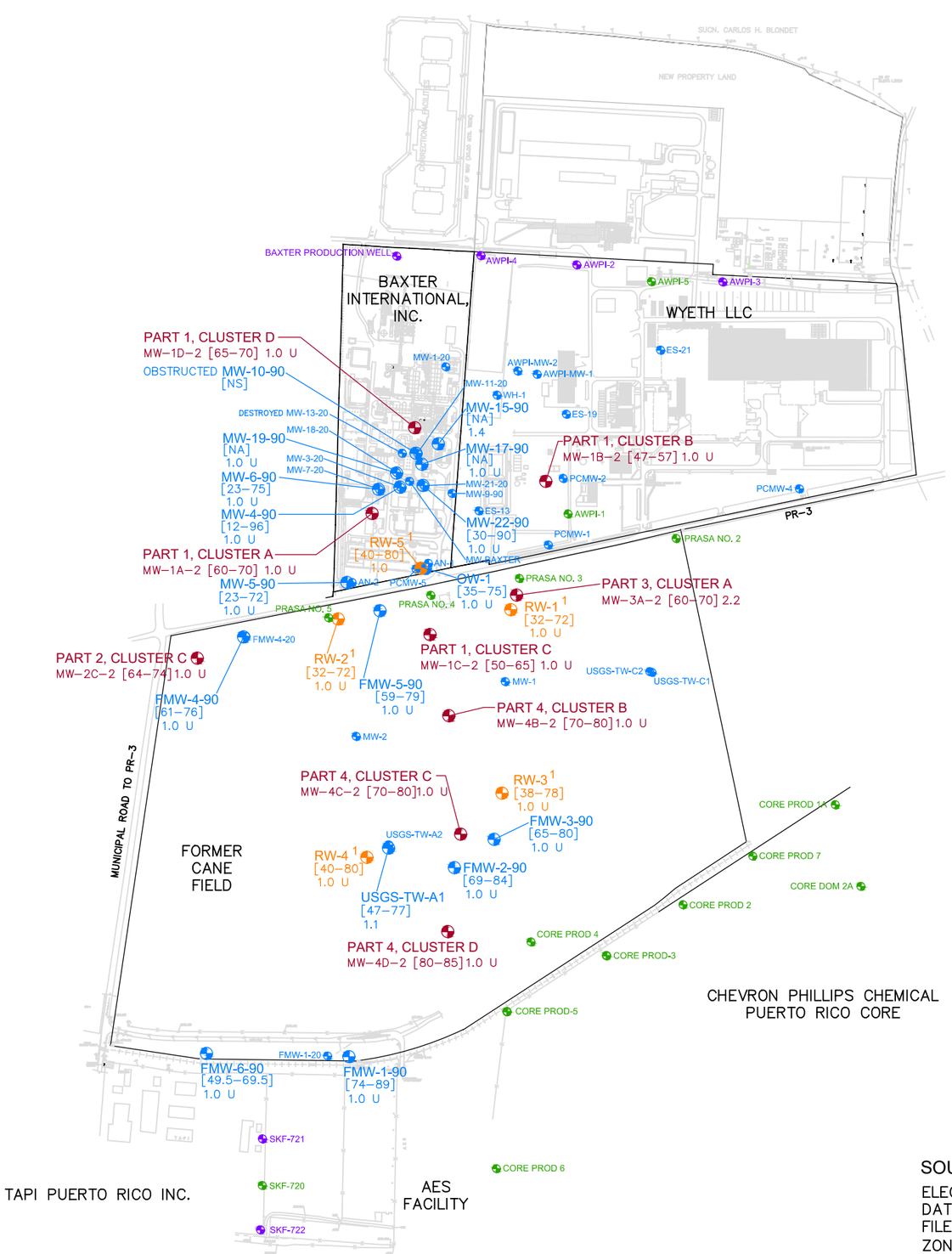
FIGURE 12

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:25am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig12 2SAR2017 TCE–Upper.dwg



0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 2.0 TRICHLOROETHENE (TCE) GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. TCE WAS NOT DETECTED ABOVE THE GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L.
3. WELLS AND DATA IN MIDDLE HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TRICHLOROETHENE (TCE) GROUNDWATER CONCENTRATION MAP MIDDLE HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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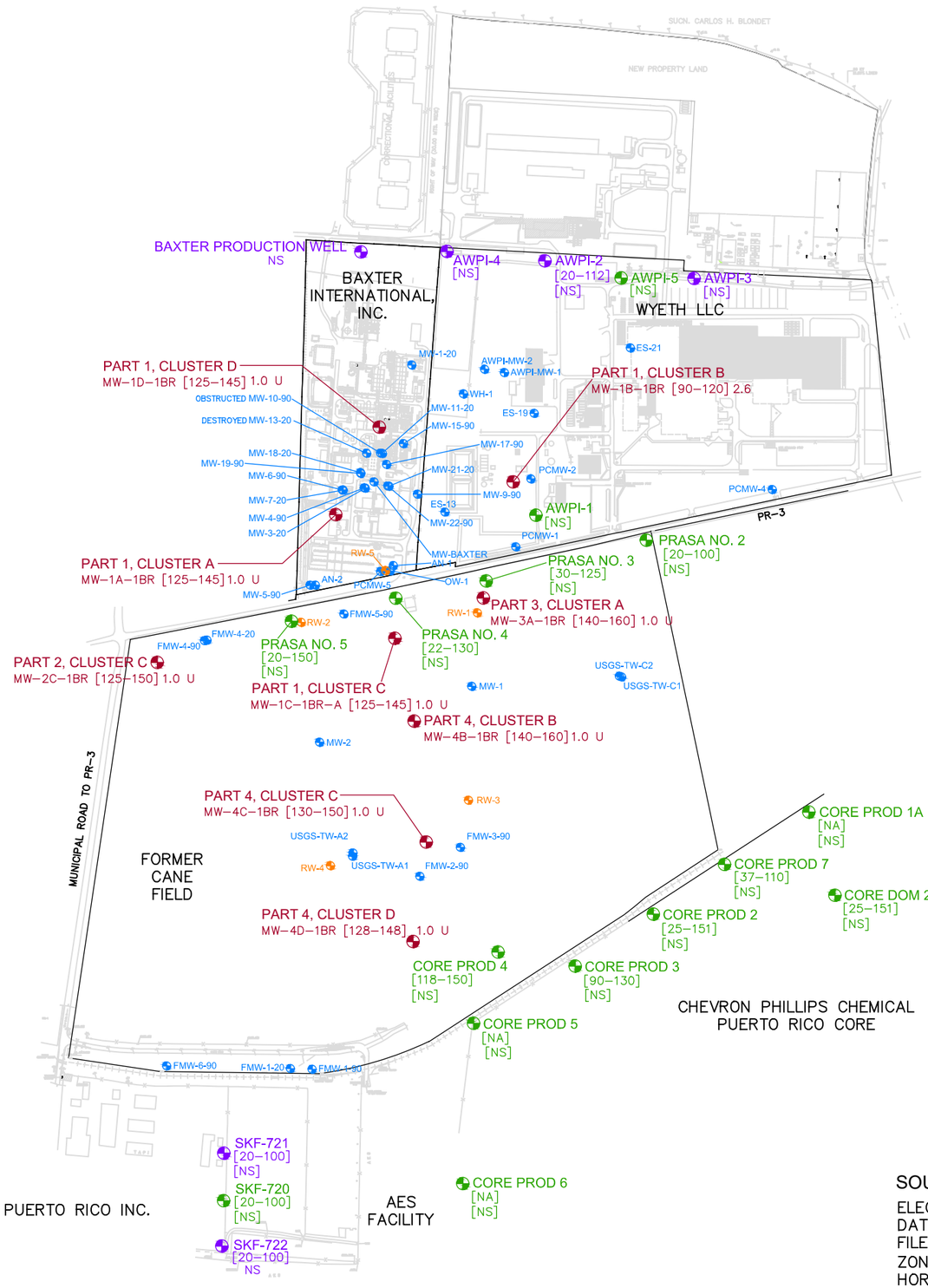
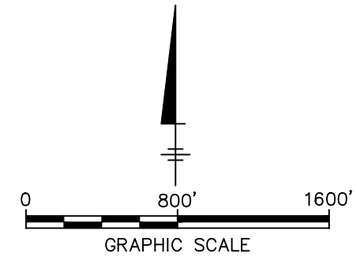
FIGURE 13

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:27am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig13 2SAR2017 TCE–Middle.dwg





LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 2.3 TRICHLOROETHENE (TCE) GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. TCE WAS NOT DETECTED ABOVE THE GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L.
2. WELLS AND DATA IN LOWER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TRICHLOROETHENE (TCE) GROUNDWATER CONCENTRATION MAP LOWER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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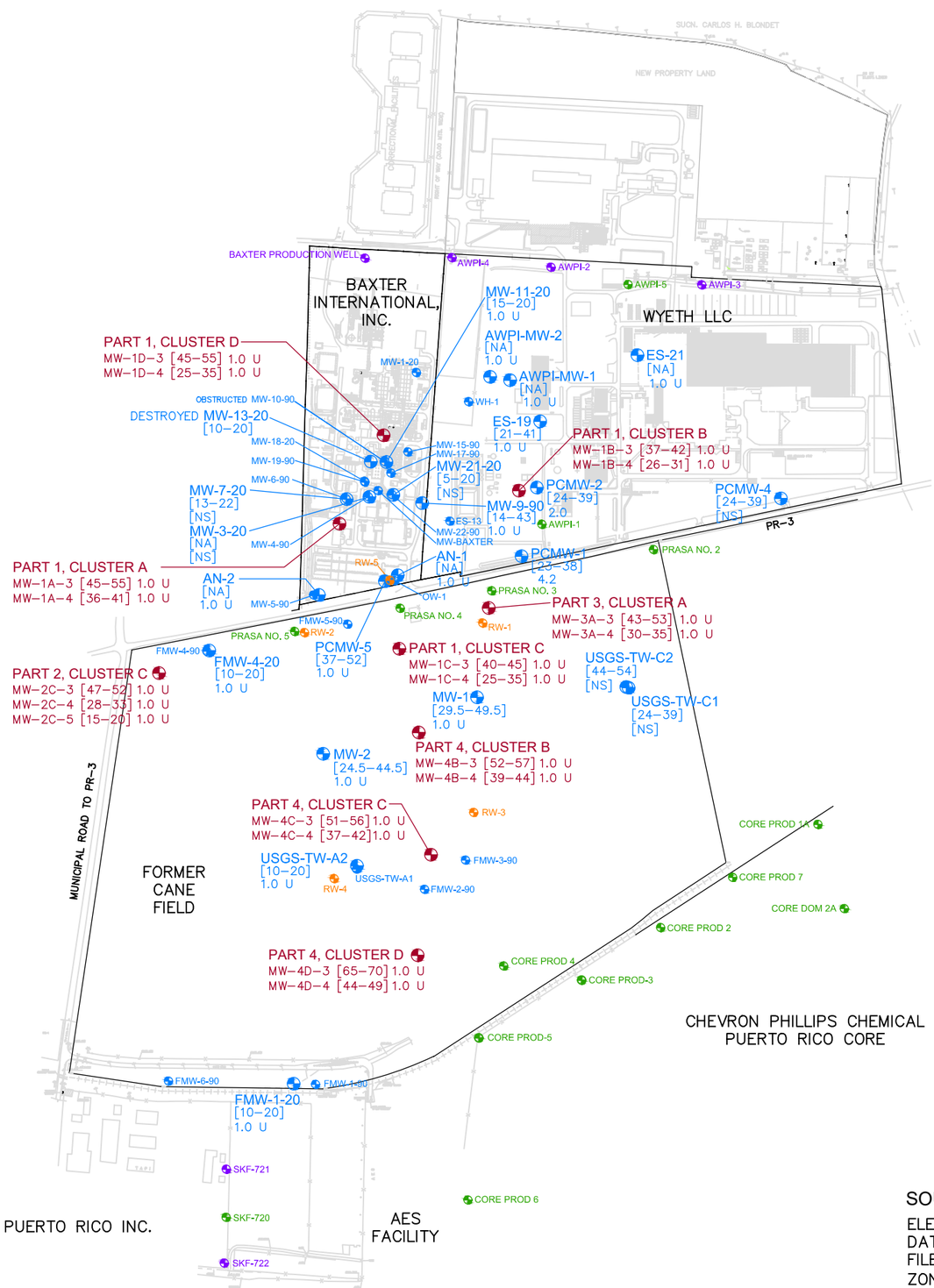
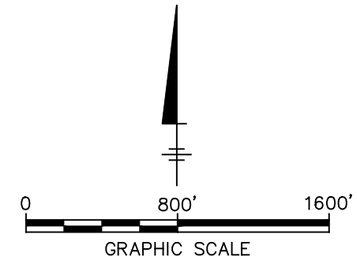
FIGURE 14

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:31am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig14 2SAR2017 TCE–Lower.dwg





LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 1.8 CIS–1,2–DICHLOROETHENE (CIS–1,2–DCE) GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. CIS–1,2–DCE WAS NOT DETECTED ABOVE THE GROUNDWATER CLEANUP CRITERIA (GWCC) OF 70 µg/L.
2. WELLS AND DATA IN UPPER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE) GROUNDWATER CONCENTRATION MAP UPPER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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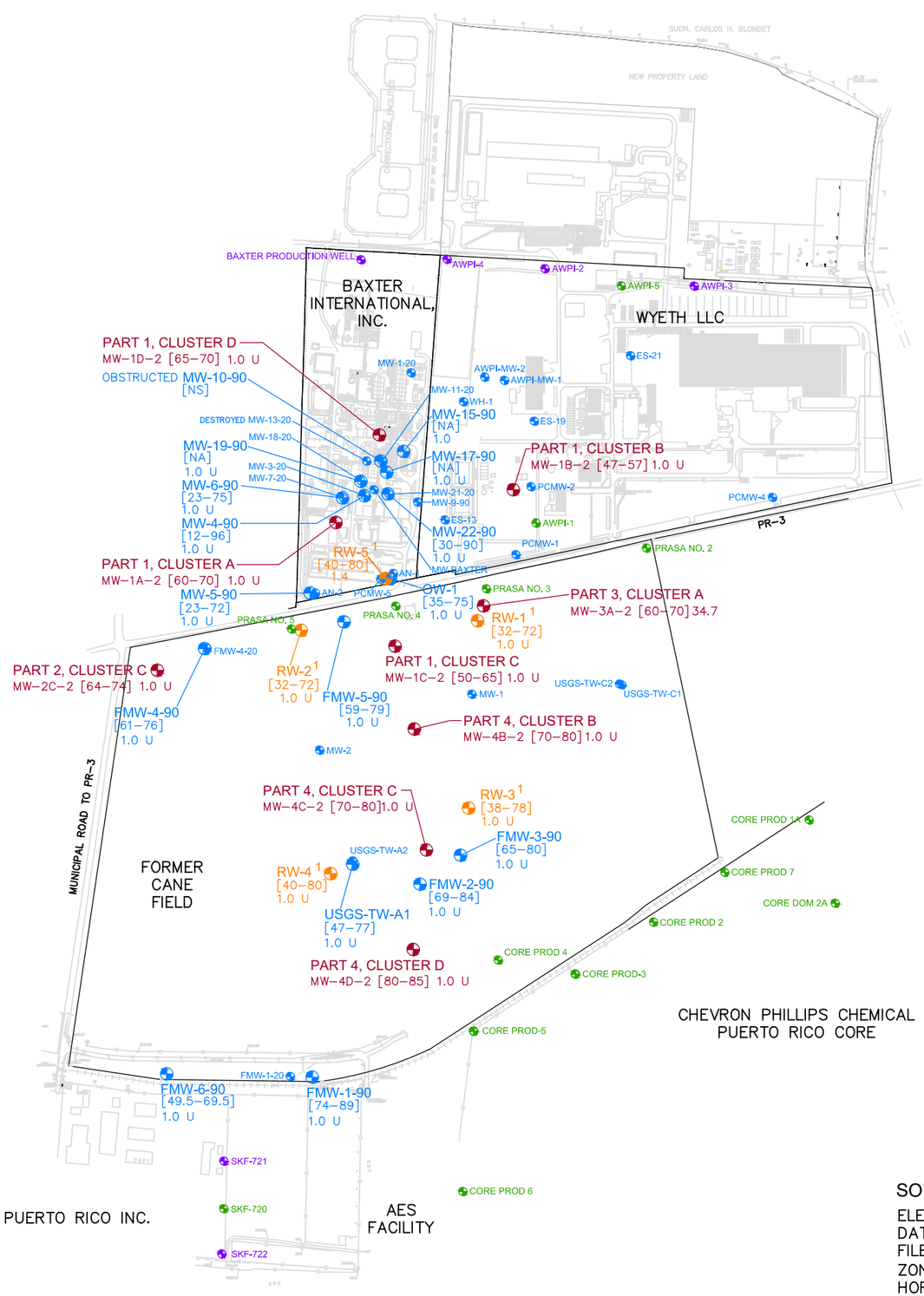
FIGURE 15

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:33am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig15 2SAR2017 DCE–Upper.dwg



LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 42.7 CIS–1,2–DICHLOROETHENE (CIS–1,2–DCE) GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [μg/L])
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. CIS–1,2–DCE WAS NOT DETECTED ABOVE THE GROUNDWATER CLEANUP CRITERIA (GWCC) OF 70 μg/L.
3. WELLS AND DATA IN MIDDLE HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE) GROUNDWATER CONCENTRATION MAP MIDDLE HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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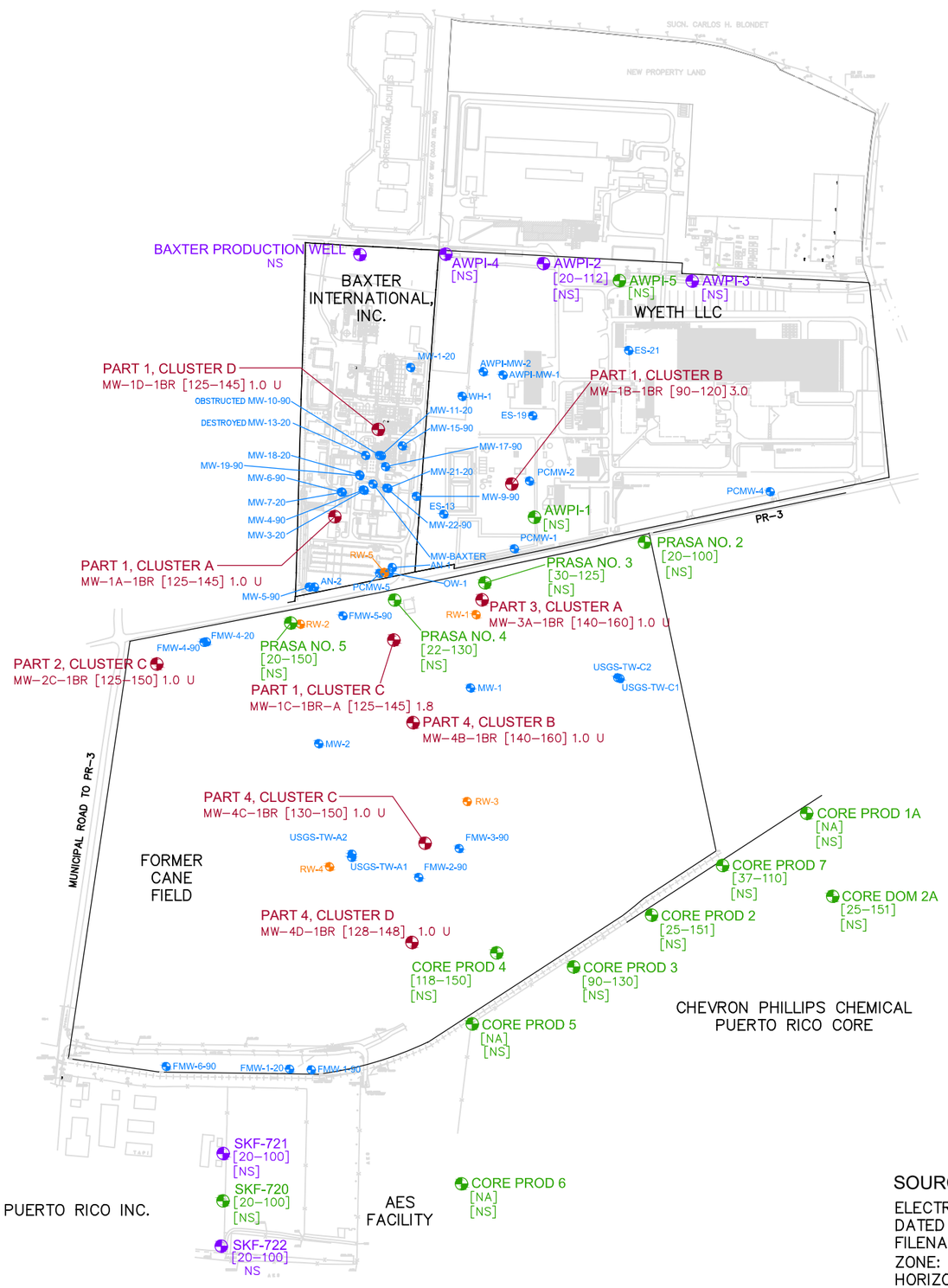
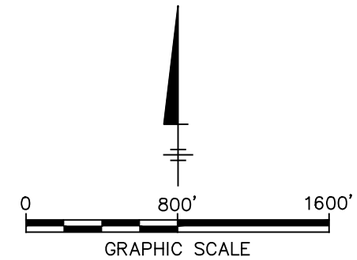
FIGURE 16

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:34am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig16 2SAR2017 DCE–Middle.dwg





LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 1.0 U CIS–1,2–DICHLOROETHENE (CIS–1,2–DCE) GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. CIS–1,2–DCE WAS NOT DETECTED ABOVE THE GROUNDWATER CLEANUP CRITERIA (GWCC) OF 70 µg/L.
2. WELLS AND DATA IN LOWER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE) GROUNDWATER CONCENTRATION MAP LOWER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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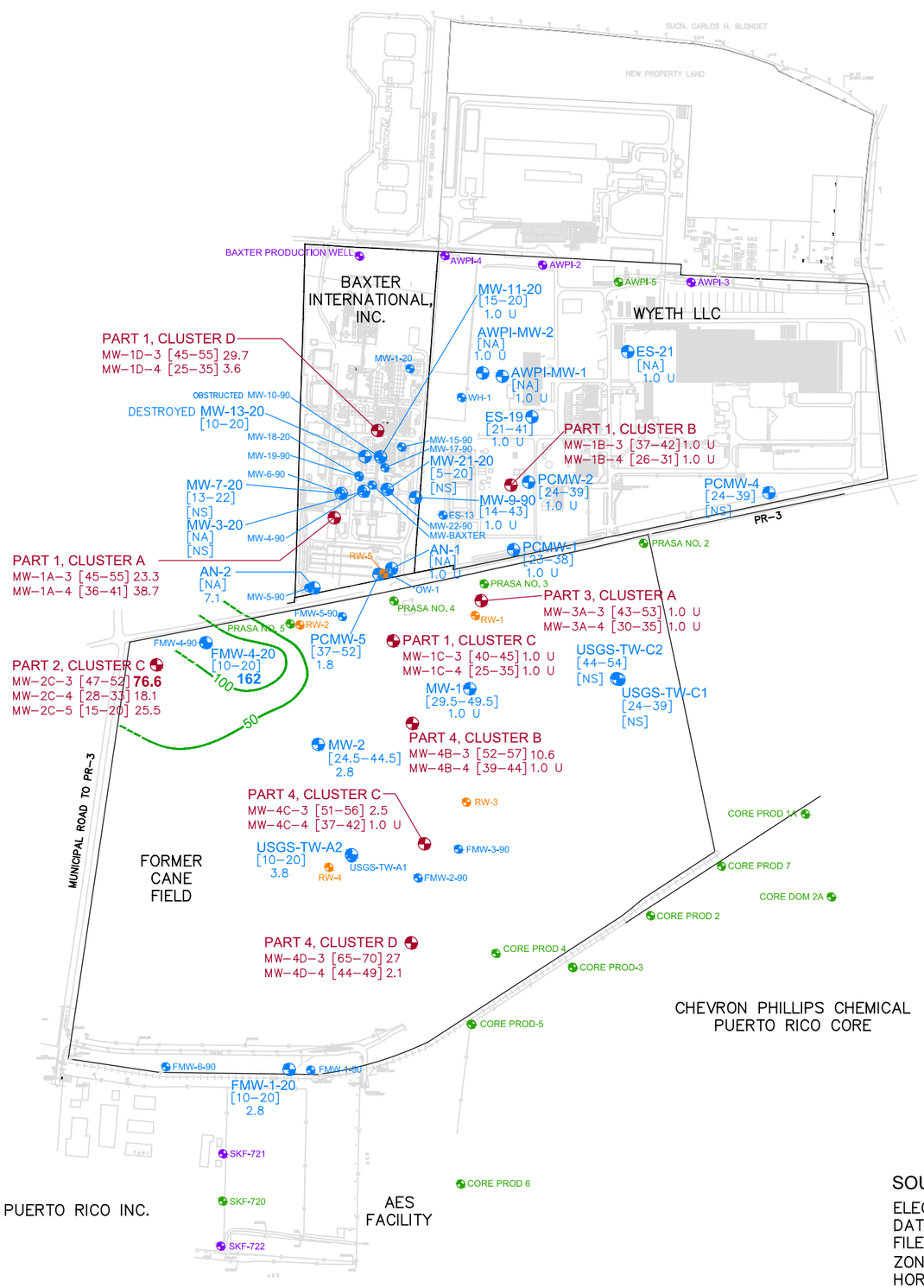
FIGURE 17

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:37am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig17 2SAR2017 DCE–Lower.dwg



0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 ISOFLURANE ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 18.1 ISOFLURANE GROUNDWATER CONCENTRATION (µg/L)
- **157** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- **J** THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS
2. WELLS AND DATA IN UPPER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

ISOFLURANE GROUNDWATER ISOPLETH MAP UPPER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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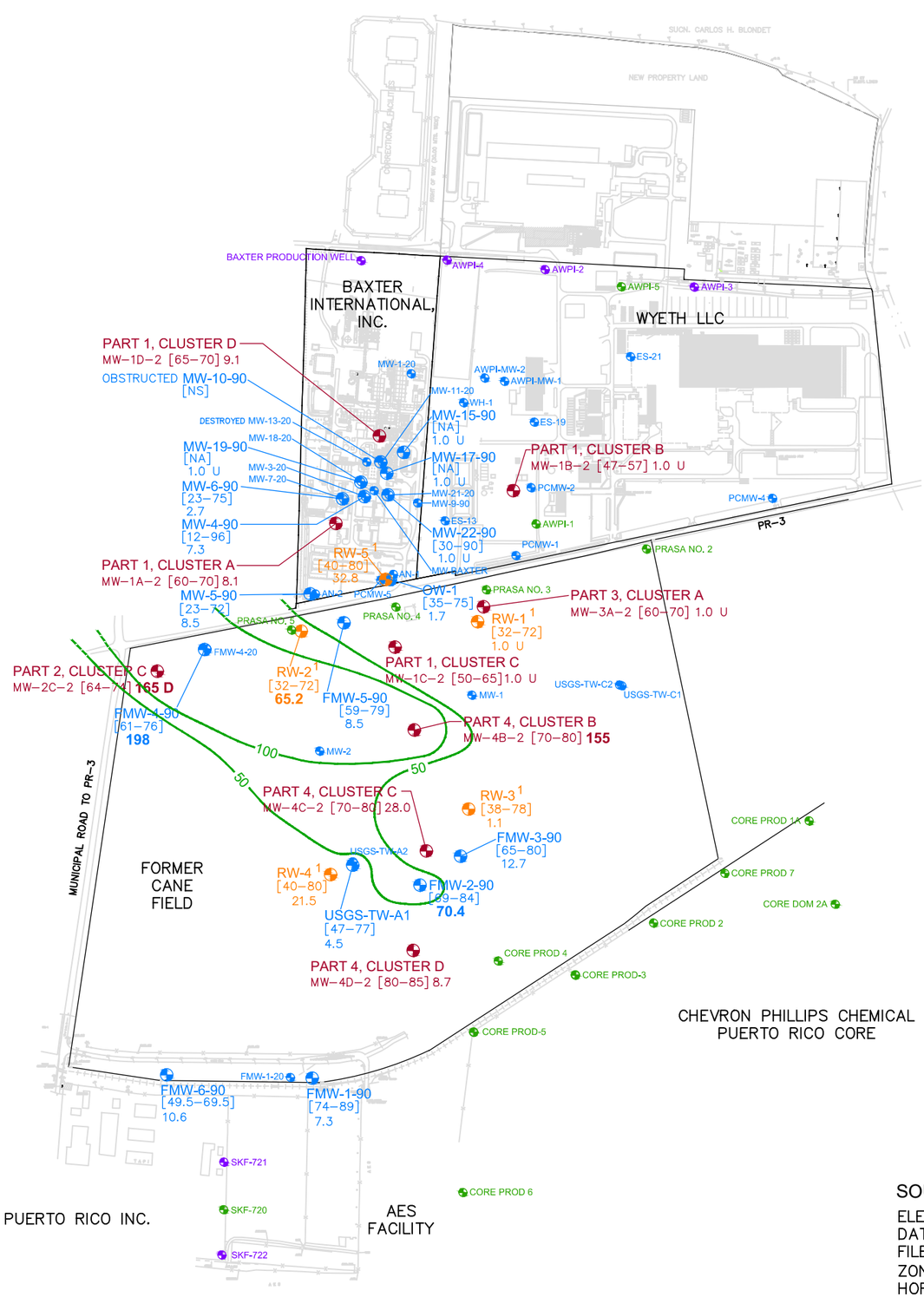
FIGURE 18

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:39am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig18 2SAR2017 ISOFLU–Upper.dwg



0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — ISOFLURANE ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 37.8 ISOFLURANE GROUNDWATER CONCENTRATION (µg/L)
- **118** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. LABORATORY QUALIFIER **D:** SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTE
3. WELLS AND DATA IN MIDDLE HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

ISOFLURANE GROUNDWATER ISOPLETH MAP MIDDLE HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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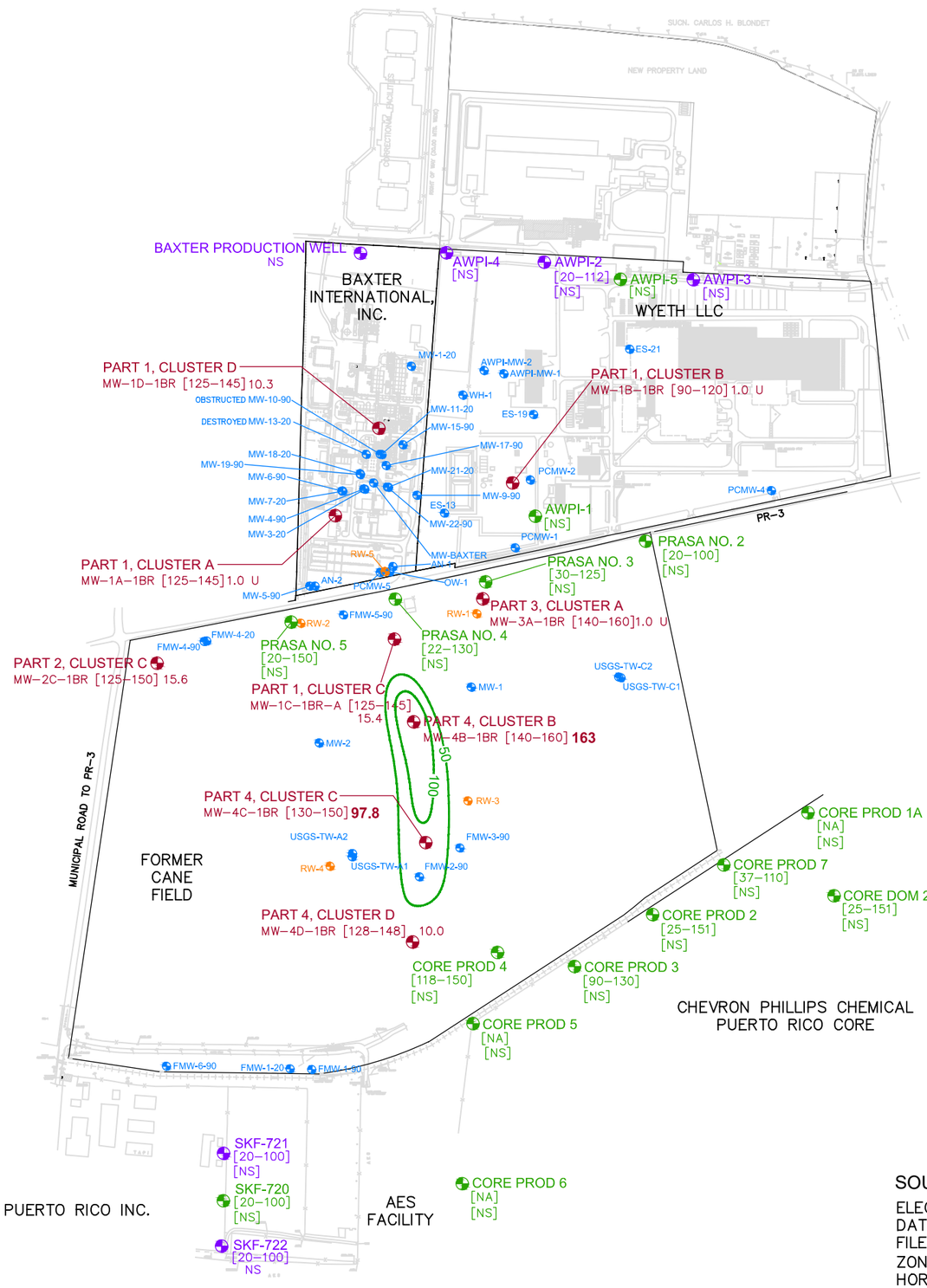
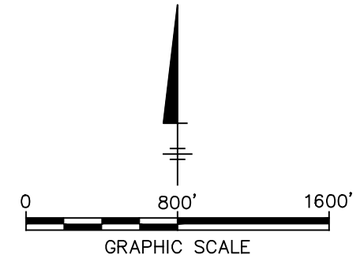
FIGURE 19

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:41am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig19 2SAR2017 ISOFLU–Middle.dwg





LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — ISOFLURANE ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 14.7 ISOFLURANE GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- **118** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- **J** THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. WELLS AND DATA IN LOWER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

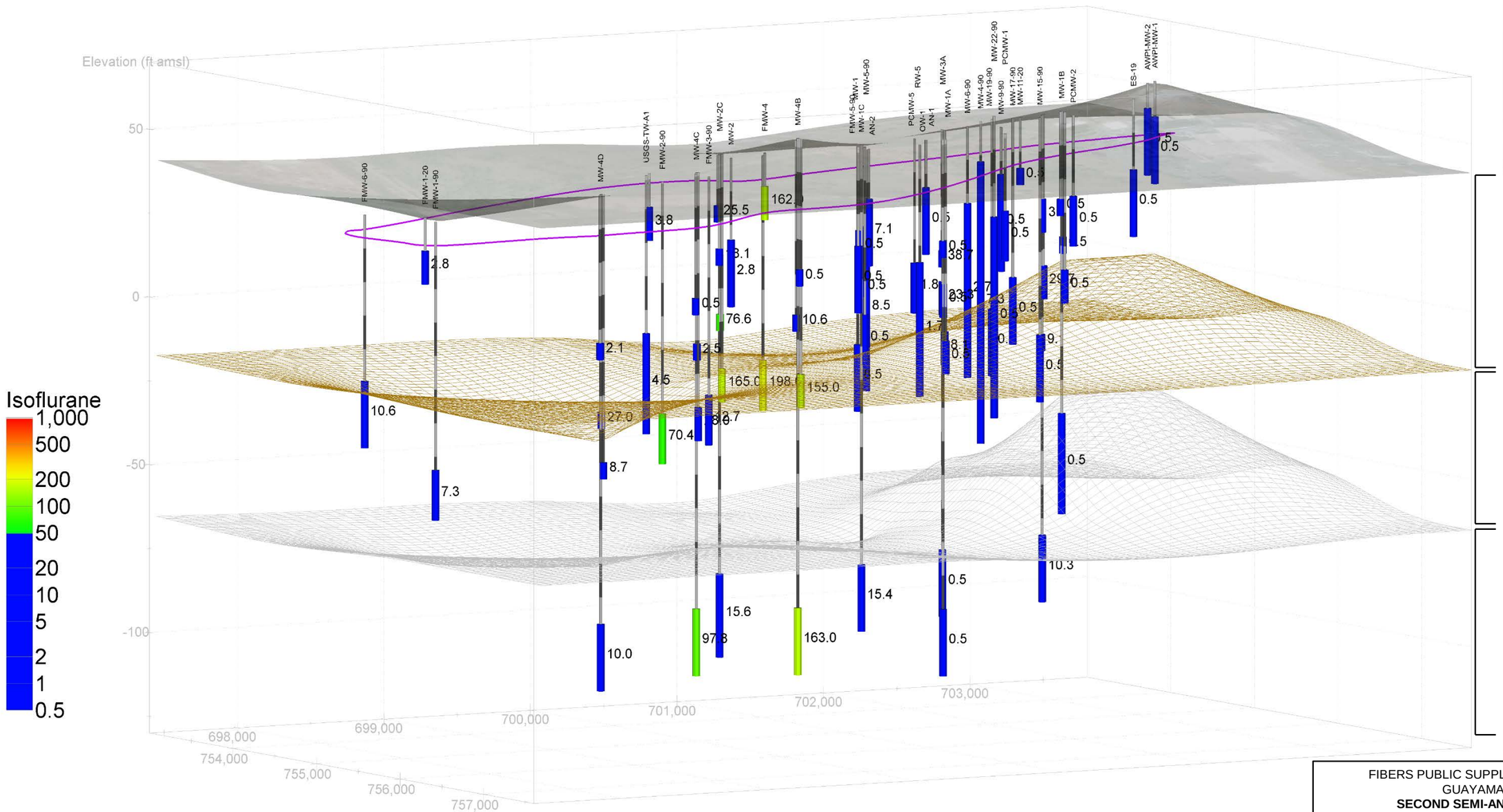
ISOFLURANE GROUNDWATER CONCENTRATION MAP LOWER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

ARCADIS Design & Consultancy for natural and built assets

FIGURE
20

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:44am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig20 2SAR2017 ISOFLU–Lower.dwg

ISOFLURANE



UPPER HSU (ALLUVIUM)

MIDDLE HSU (PARTIALLY WEATHERED BEDROCK)

LOWER HSU (BEDROCK)

Location

Well

Well Screen and Data Value

Groundwater surface

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

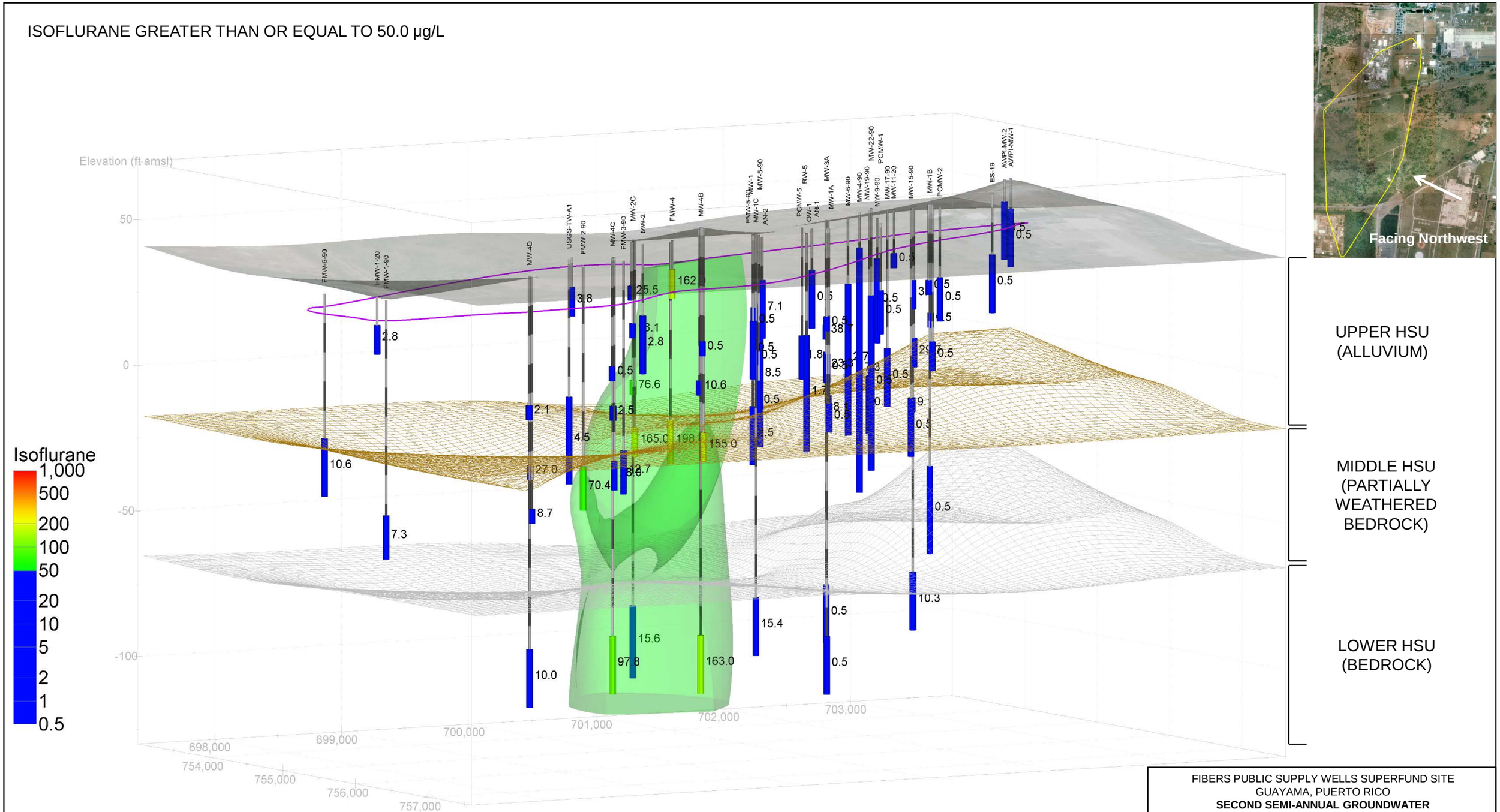
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

ISOFLURANE IN GROUNDWATER WELL LOCATIONS LOOKING NORTHWEST (NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE
21

ISOFLURANE GREATER THAN OR EQUAL TO 50.0 µg/L



Location

Well

Well Screen and Data Value

Groundwater surface

3D plume hull of Isoflurane greater than or equal to 50.0 µg/L

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

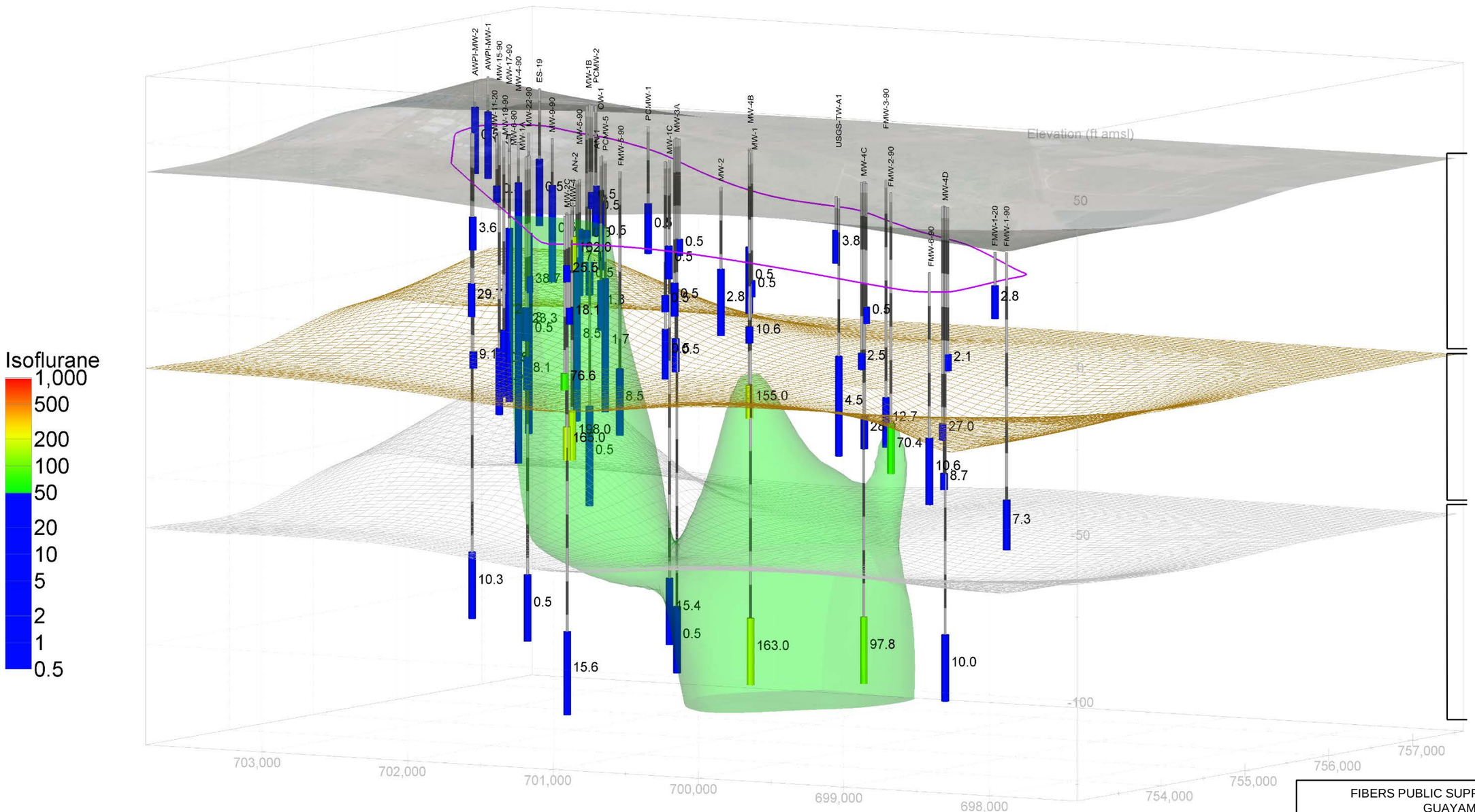
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

ISOFLURANE IN GROUNDWATER
3D PLUME LOOKING NORTHWEST
(NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE
22

ISOFLURANE GREATER THAN OR EQUAL TO 50.0 µg/L



UPPER HSU
(ALLUVIUM)

MIDDLE HSU
(PARTIALLY
WEATHERED
BEDROCK)

LOWER HSU
(BEDROCK)

SKF-722 Location

Well — Well Screen and Data Value (34.0)

Groundwater surface

3D plume hull of Isoflurane greater than or equal to 50.0 µg/L

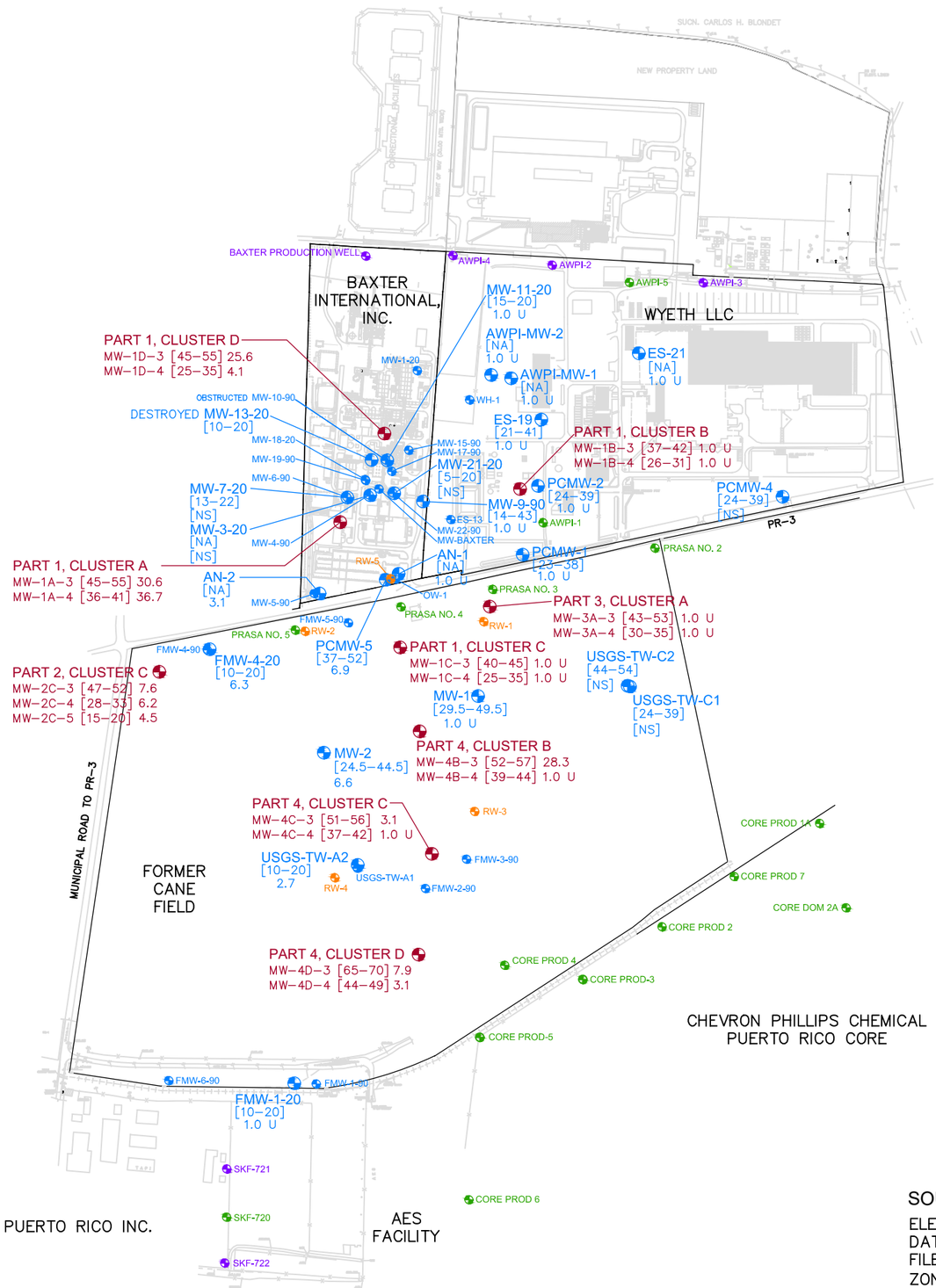
NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

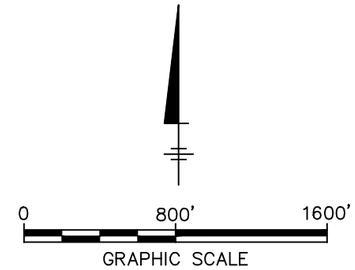
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

ISOFLURANE IN GROUNDWATER
3D PLUME LOOKING NORTHEAST
(NOV. 2017-JAN. 2018)

ARCADIS

FIGURE
23





LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — HALOETHER 508 ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 30.7 HALOETHER 508 GROUNDWATER CONCENTRATION (µg/L)
- **97.1** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. WELLS AND DATA IN UPPER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION
2. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

HALOETHER 508 GROUNDWATER ISOPLETH MAP UPPER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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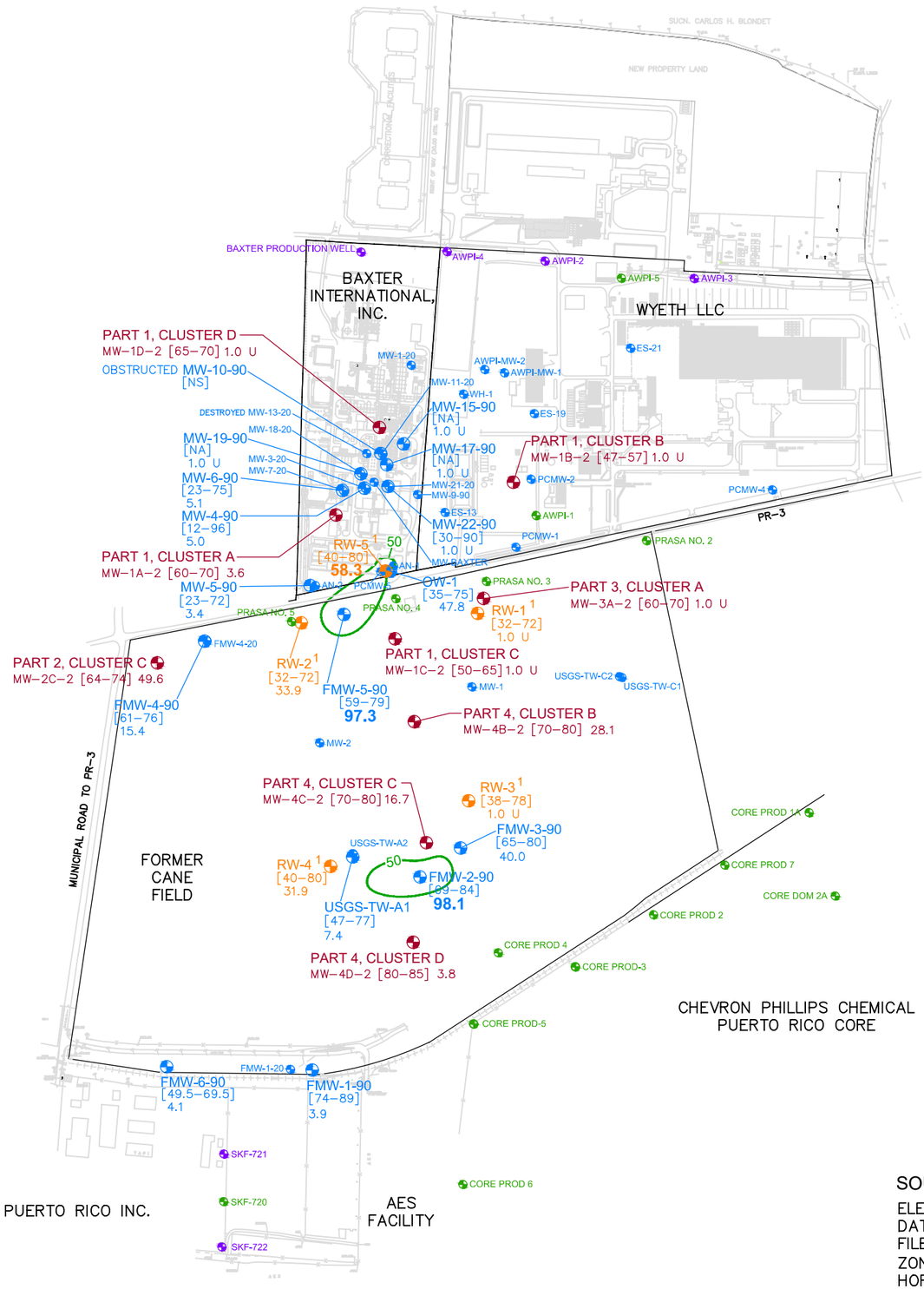
FIGURE **24**

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:46am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig24 2SAR2017 HAL0508–Upper.dwg



0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — HALOETHER 508 ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 2.2 HALOETHER 508 GROUNDWATER CONCENTRATION (µg/L)
- **169** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR-3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS
3. WELLS AND DATA IN MIDDLE HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

HALOETHER 508 GROUNDWATER ISOPLETH MAP MIDDLE HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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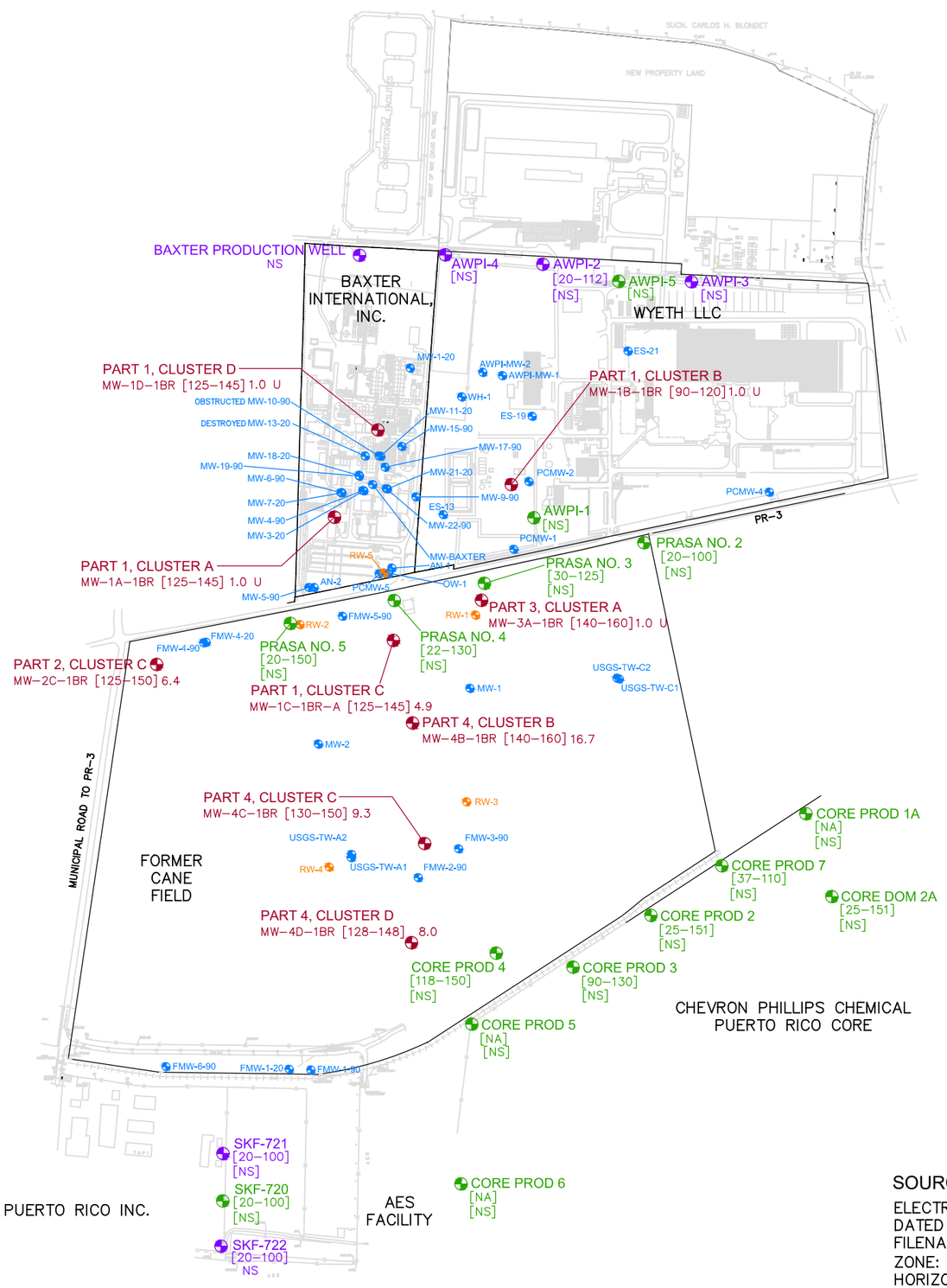
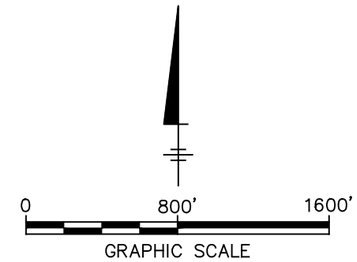
FIGURE 25

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 - 9:48am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig25 2SAR2017 HAL0508-Middle.dwg





LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — HALOETHER 508 ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 11.4 HALOETHER 508 GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- **158** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- J THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. TOTAL HALOETHERS WERE NOT DETECTED ABOVE THE GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L.
2. WELLS AND DATA IN LOWER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

HALOETHER 508 GROUNDWATER CONCENTRATION MAP LOWER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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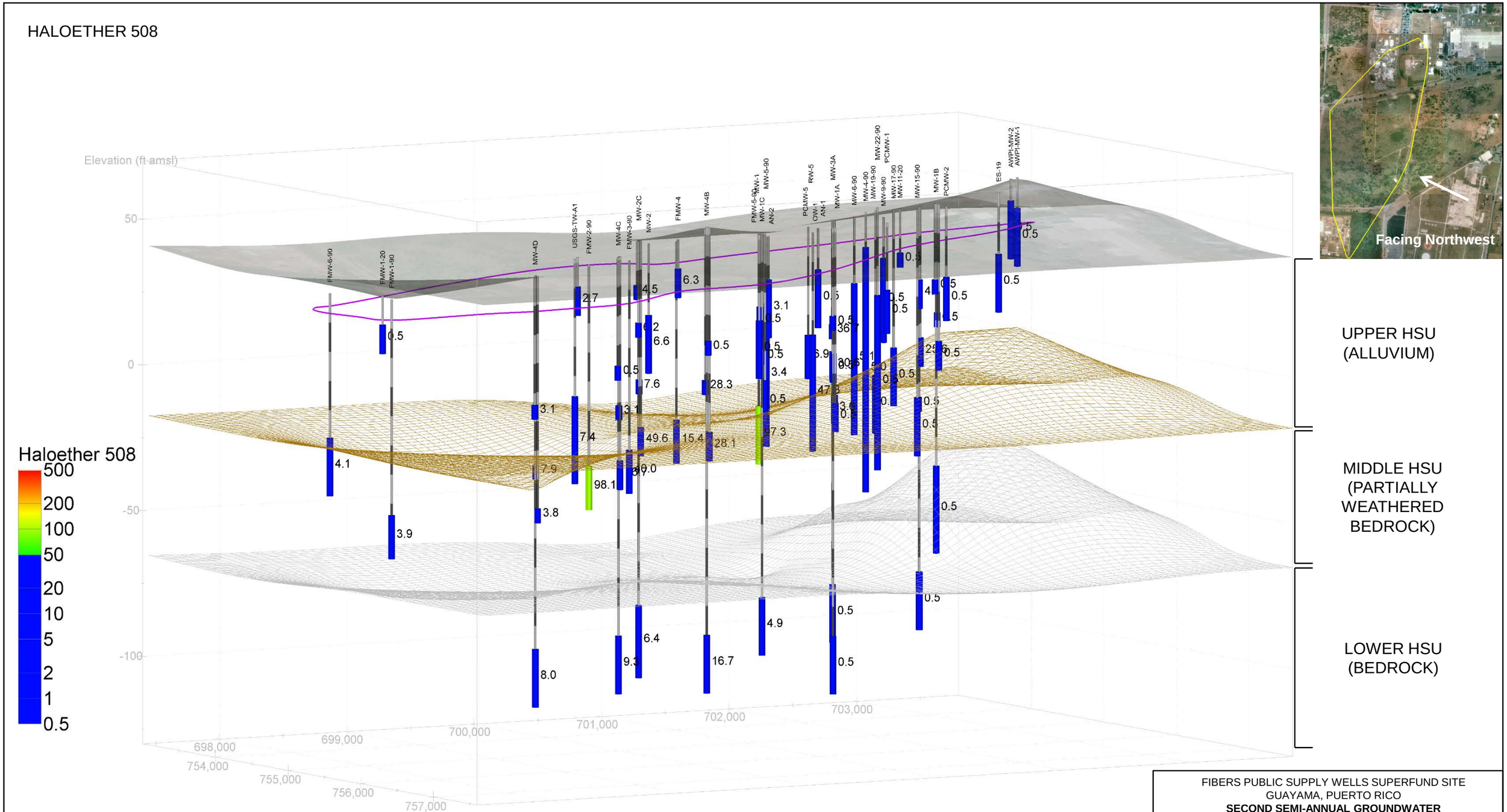
FIGURE
26

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:50am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig26 2SAR2017 HAL0508–Lower.dwg

HALOETHER 508



Location

Well

Well Screen and Data Value

Groundwater surface

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

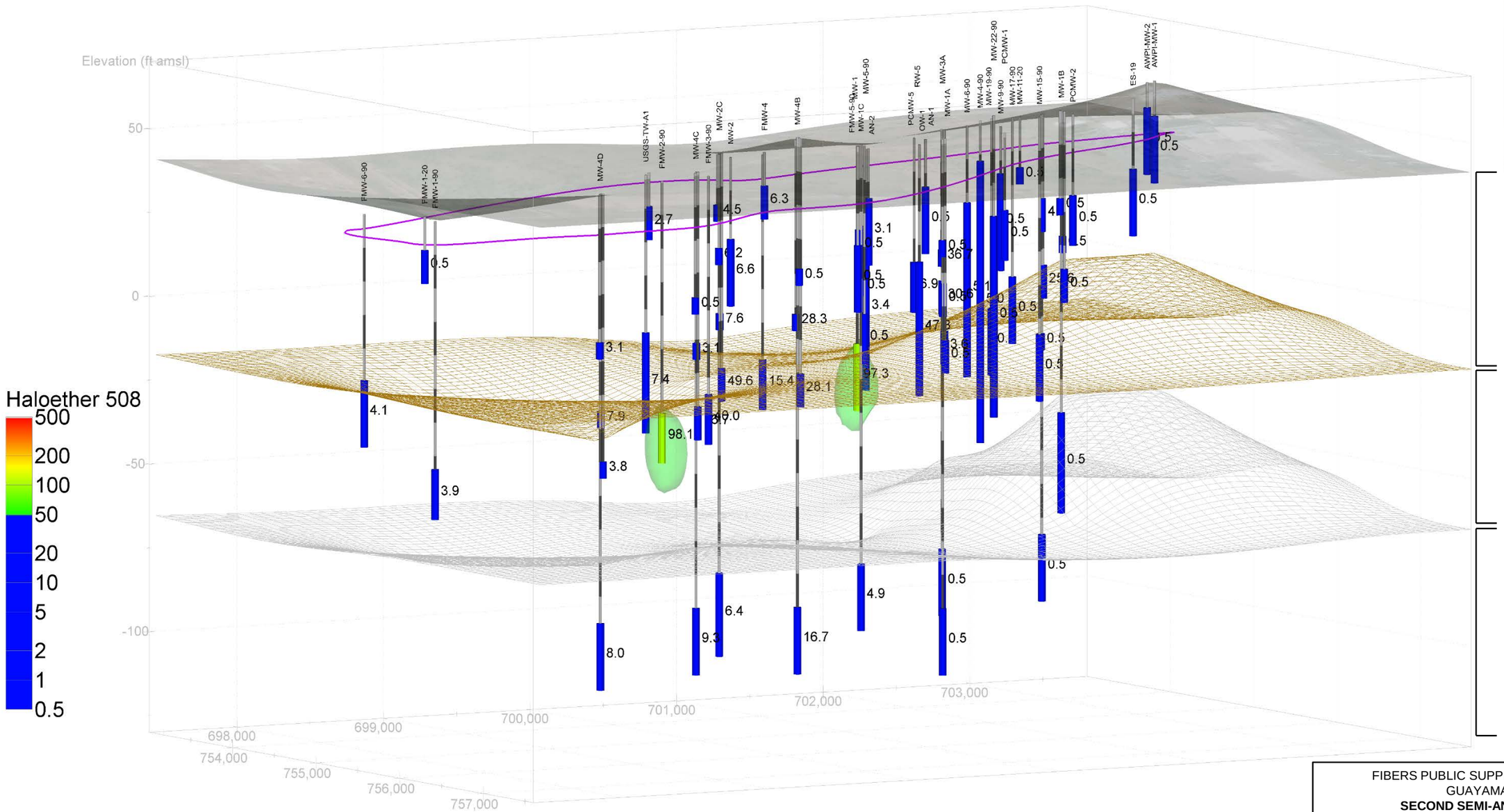
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

HALOETHER 508 IN GROUNDWATER WELL LOCATIONS LOOKING NORTHWEST (NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE
27

HALOETHER 508 GREATER THAN OR EQUAL TO 50.0 µg/L



UPPER HSU (ALLUVIUM)

MIDDLE HSU (PARTIALLY WEATHERED BEDROCK)

LOWER HSU (BEDROCK)

Location

Well

Well Screen and Data Value

Groundwater surface

3D plume hull of Haloether 508 greater than or equal to 50.0 µg/L

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

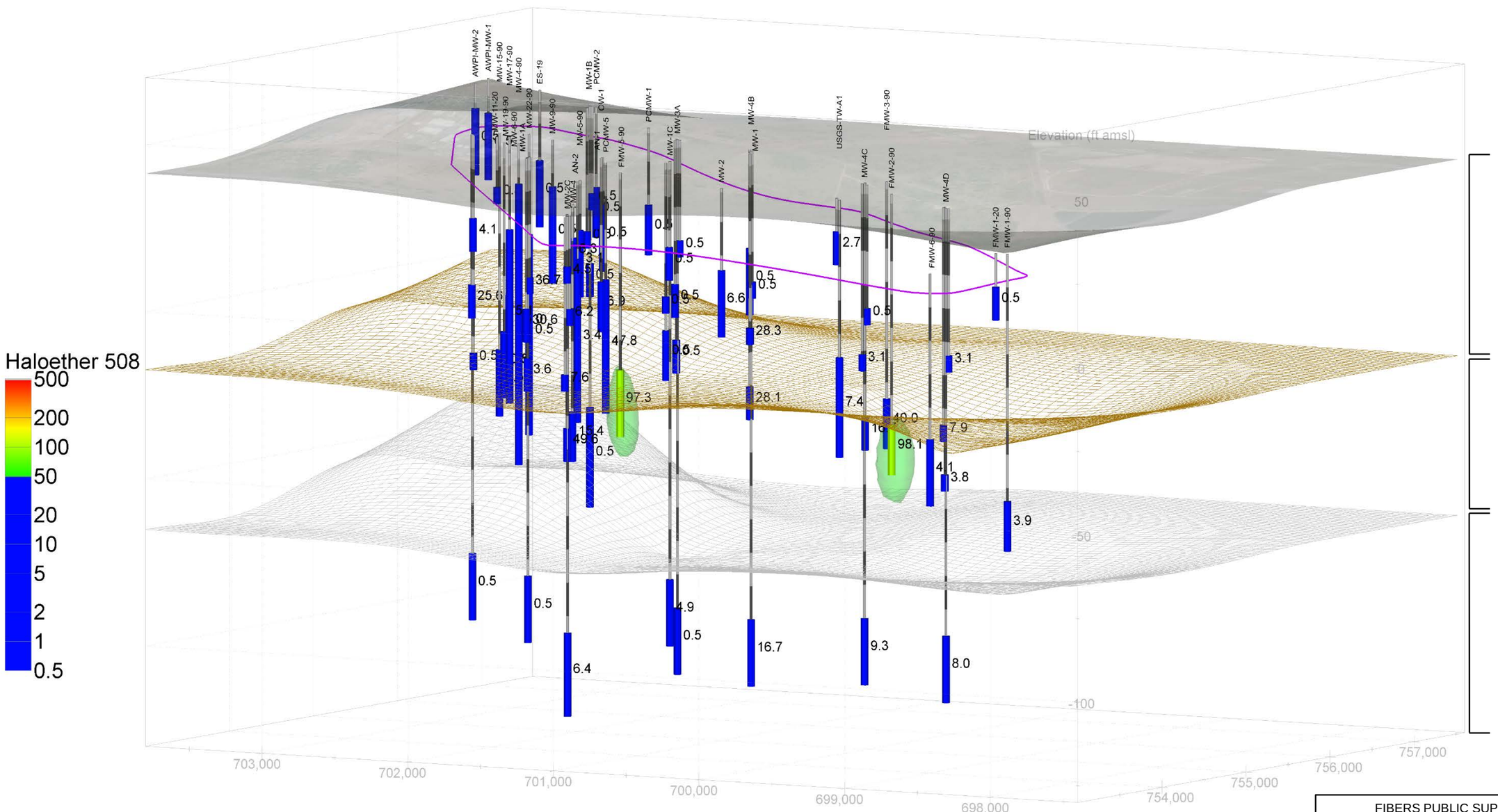
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

HALOETHER 508 IN GROUNDWATER
3D PLUME LOOKING NORTHWEST
(NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE
28

HALOETHER 508 GREATER THAN OR EQUAL TO 50.0 µg/L



Location

Well

Well Screen and Data Value

Groundwater surface

3D plume hull of Haloether 508 greater than or equal to 50.0 µg/L

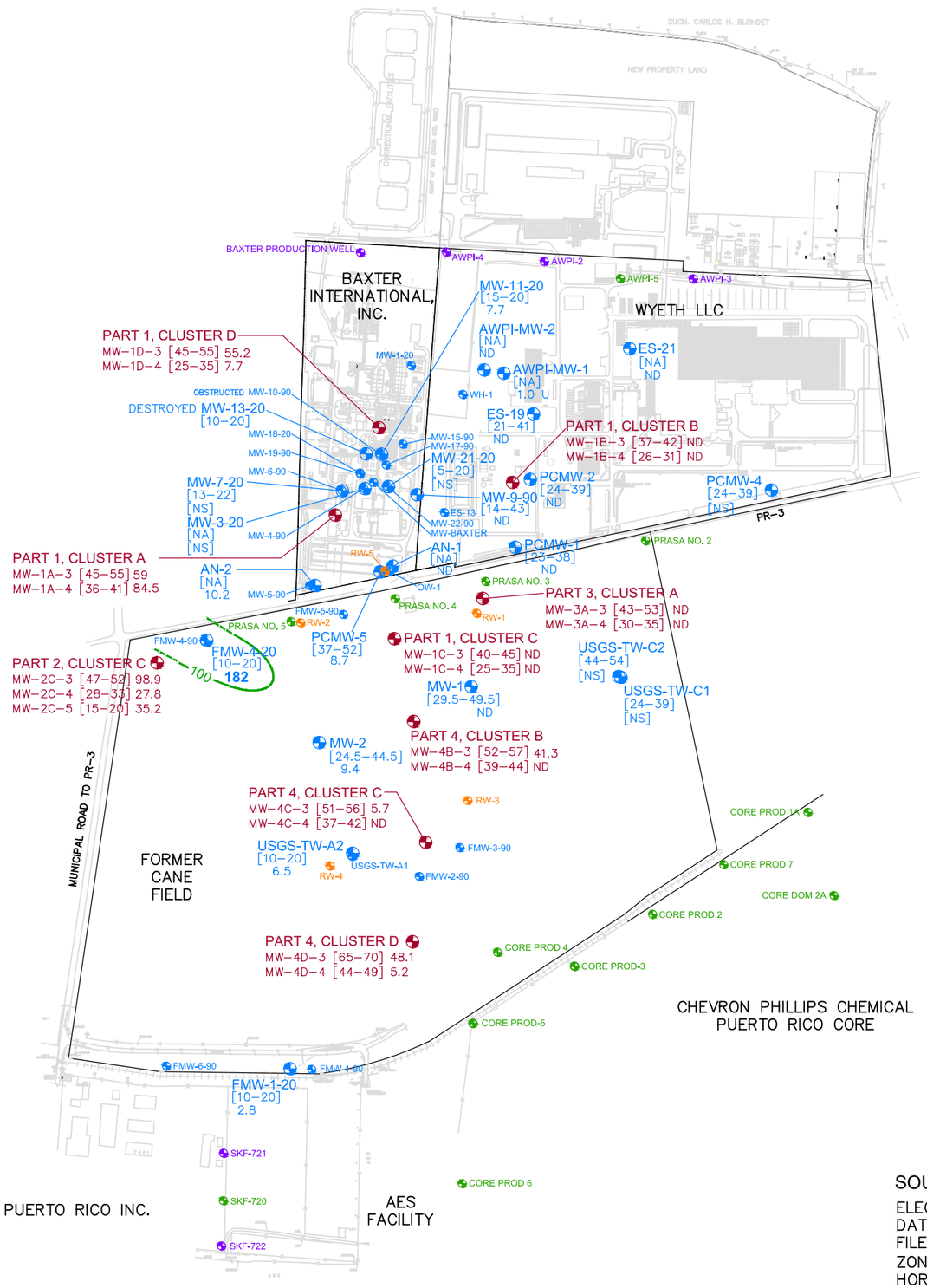
NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

HALOETHER 508 IN GROUNDWATER 3D PLUME LOOKING NORTHEAST (NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE
29



0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 100 TOTAL HALOETHERS ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- TOTAL HALOETHERS GROUNDWATER CONCENTRATION (µg/L)
- **115** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 100 µg/L
- NOT DETECTED AT THE REPORTING LIMIT
- WELL SCREEN INTERVAL NOT AVAILABLE
- NOT SAMPLED
- GROUNDWATER NOT ENCOUNTERED
- PR-3 PUERTO RICO HIGHWAY 3

NOTES:

1. WELLS AND DATA IN UPPER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION
2. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

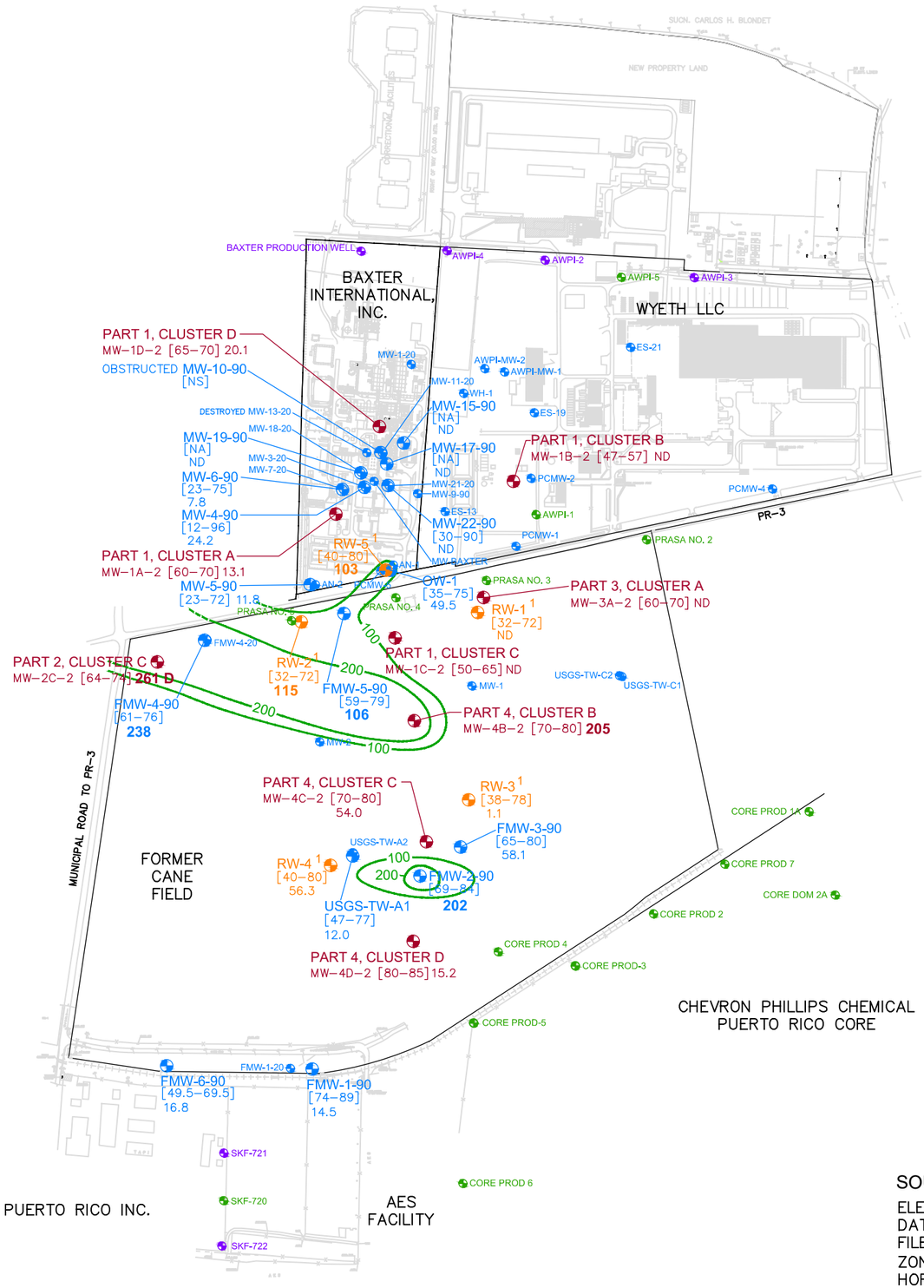
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

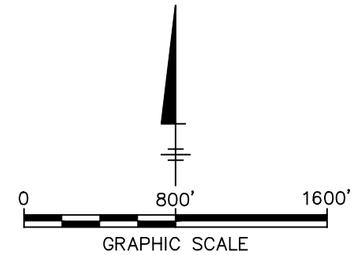
TOTAL HALOETHERS GROUNDWATER ISOPLETH MAP UPPER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

ARCADIS Design & Consultancy for natural and built assets

FIGURE 30

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 - 9:52am
User Name : ekrahmer Path\Name : C:\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig30 2SAR2017 TTLHALO-Upper.dwg





LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 100 — TOTAL HALOETHERS ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 5.5 TOTAL HALOETHERS GROUNDWATER CONCENTRATION (µg/L)
- **137** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 100 µg/L
- ND NOT DETECTED AT THE REPORTING LIMIT
- [NA] WELL SCREEN INTERVAL NOT APPLICABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- * NOT USED FOR CONTOURING
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS
3. WELLS AND DATA IN MIDDLE HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

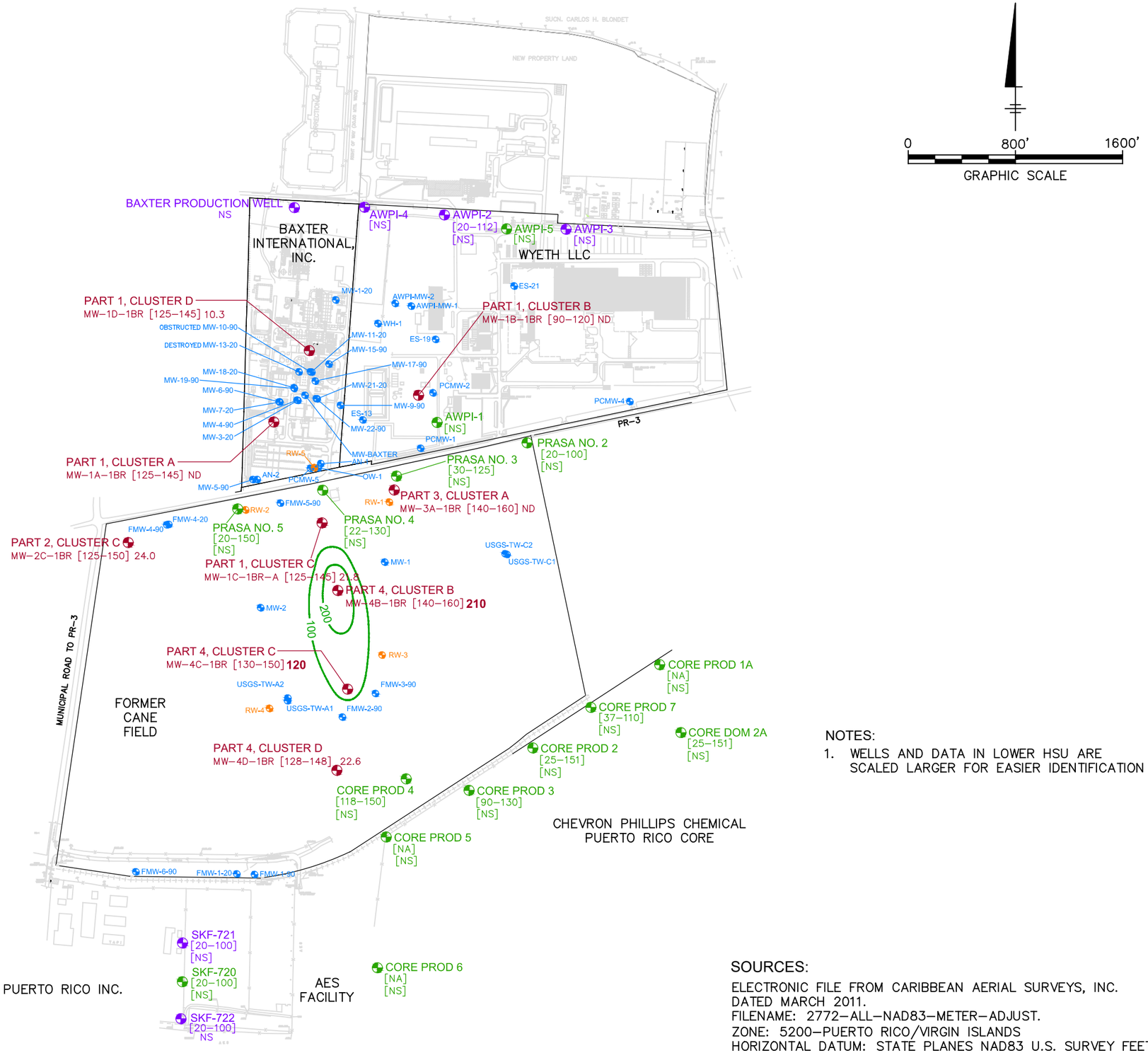
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TOTAL HALOETHERS GROUNDWATER ISOPLETH MAP MIDDLE HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

ARCADIS Design & Consultancy for natural and built assets

FIGURE 31

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:54am
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig31 2SAR2017 TTLHALO–Middle.dwg



0 800' 1600'
GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — TOTAL HALOETHER ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- [51–56] WELL SCREEN INTERVAL (FEET BELOW TOP OF WELL CASING)
- 26.2 TOTAL HALOETHERS GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- 137 CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 100 µg/L
- J THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- ND NOT DETECTED AT THE REPORTING LIMIT
- [NA] WELL SCREEN INTERVAL NOT AVAILABLE
- [NS] NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR–3 PUERTO RICO HIGHWAY 3

NOTES:

1. WELLS AND DATA IN LOWER HSU ARE SCALED LARGER FOR EASIER IDENTIFICATION

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TOTAL HALOETHERS GROUNDWATER ISOPLETH MAP LOWER HYDROSTRATIGRAPHIC UNIT (HSU) (NOV. 2017 - JAN. 2018)

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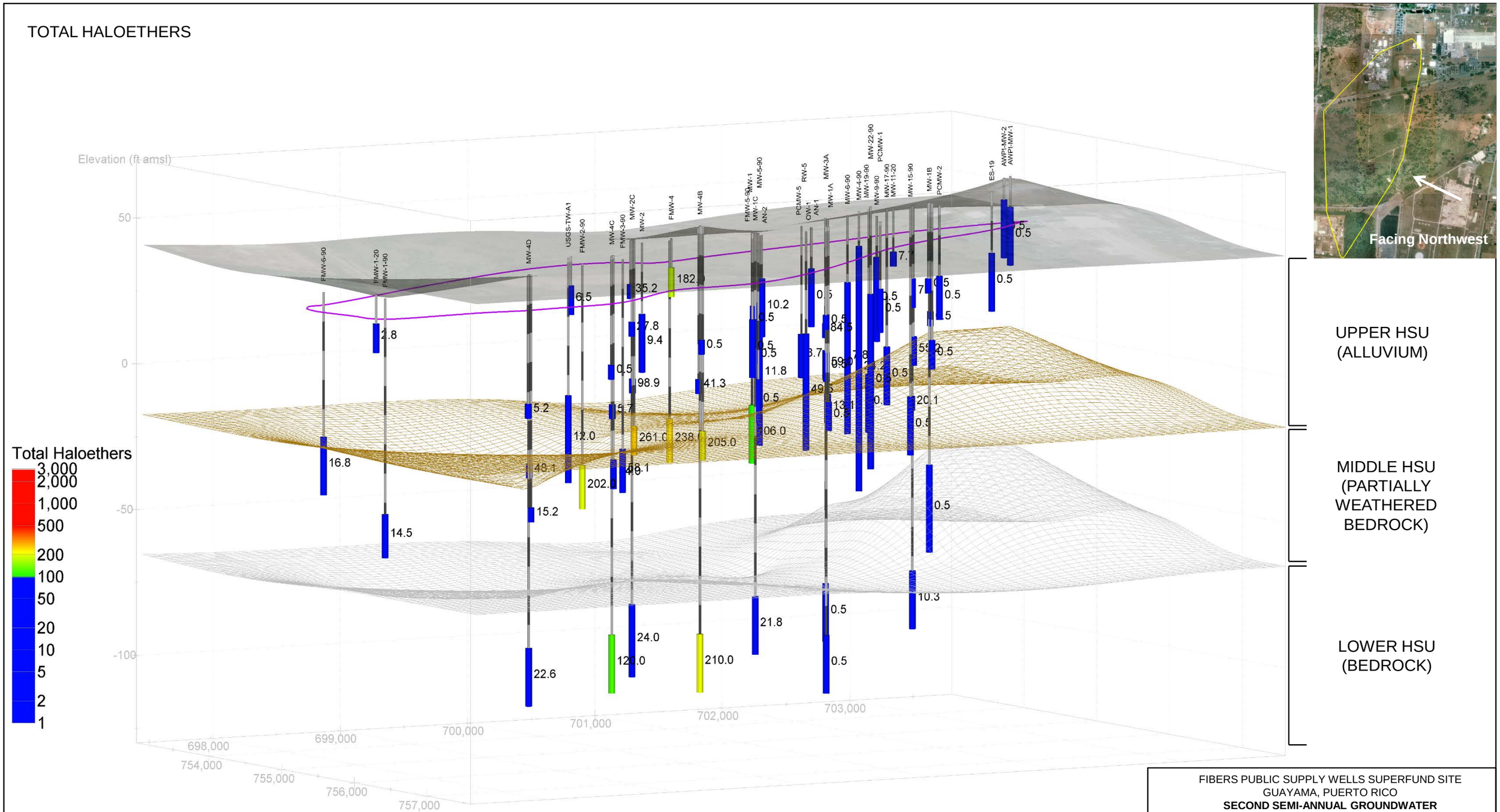
FIGURE
32

Acad Version : R21.0s (LMS Tech) Date\Time : Tue, 03 Apr 2018 – 9:57am
User Name : ekrahmer Path\Name : C:\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\Fig32 2SAR2017 TTLHALO–Lower.dwg

TOTAL HALOETHERS



Location

Well

Well Screen and Data Value

Groundwater surface

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
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SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TOTAL HALOETHERS IN GROUNDWATER WELL LOCATIONS LOOKING NORTHWEST (NOV. 2017 - JAN. 2018)

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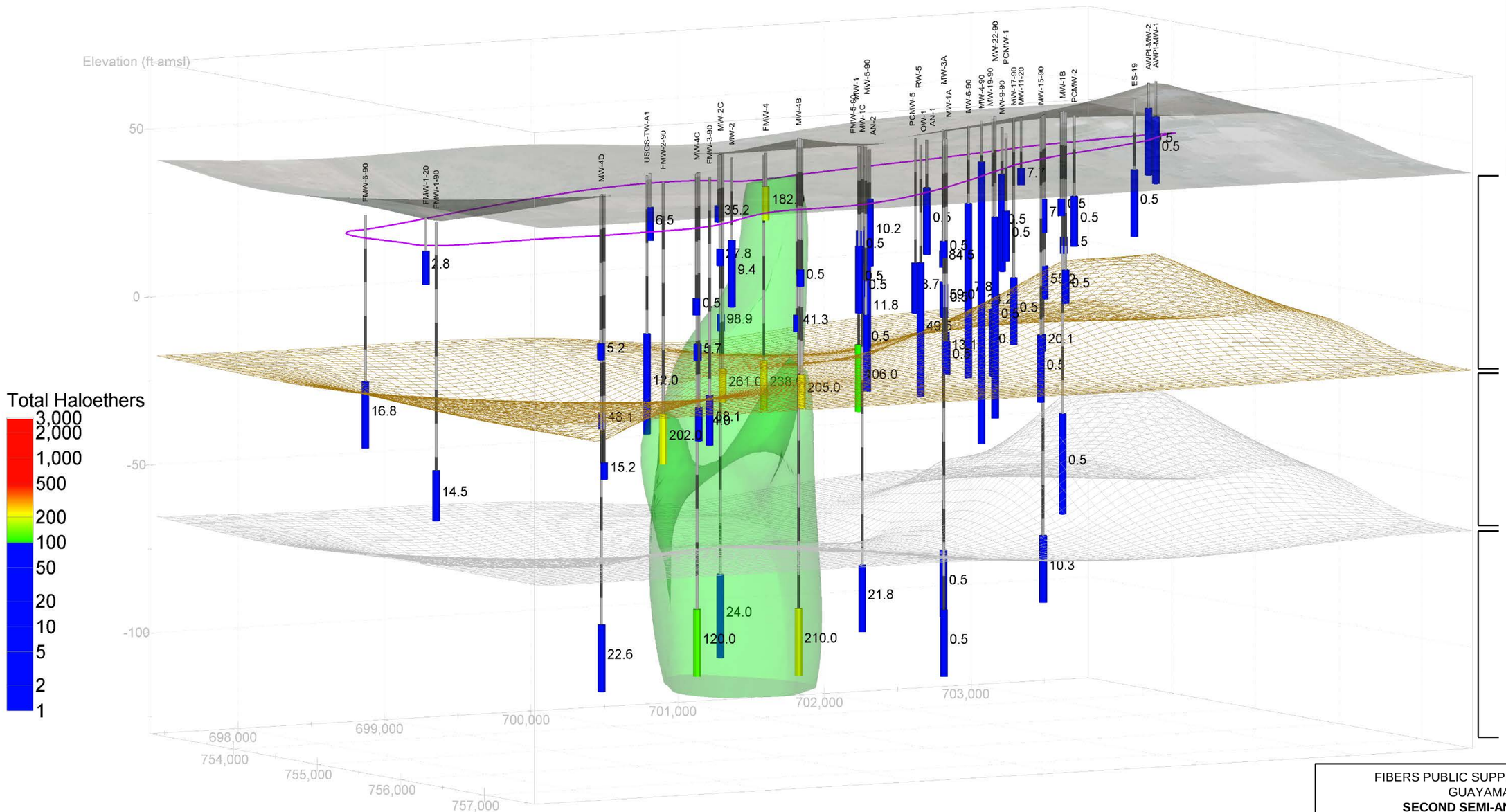
FIGURE
33

TOTAL HALOETHERS GREATER THAN OR EQUAL TO 100.0 µg/L



Location

Well

Well Screen and Data Value

Groundwater surface

3D plume hull of Total Haloethers greater than or equal to 100.0 µg/L

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

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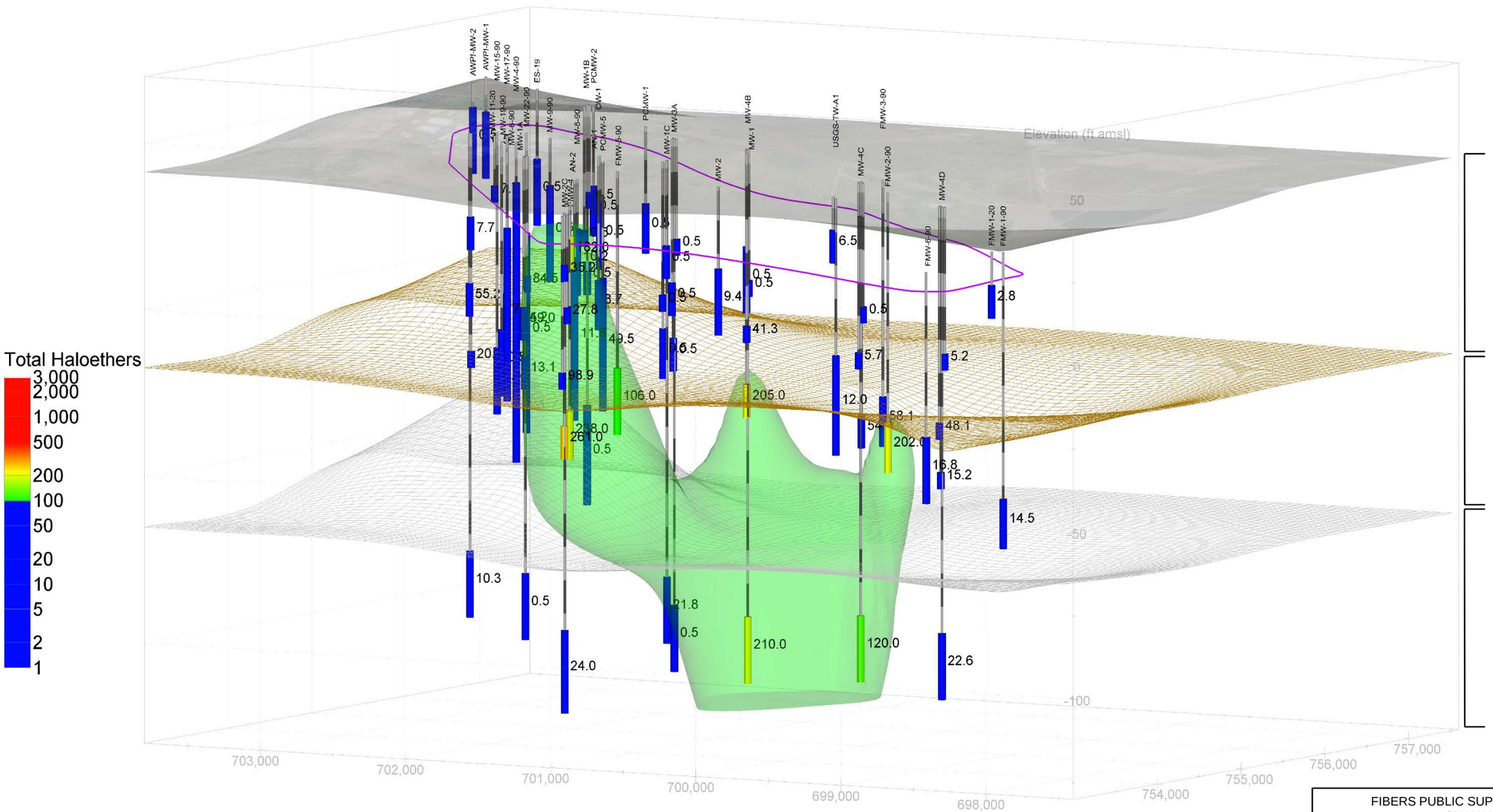
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TOTAL HALOETHERS IN GROUNDWATER 3D PLUME LOOKING NORTHWEST (NOV. 2017 - JAN. 2018)

ARCADIS

FIGURE **34**

TOTAL HALOETHERS GREATER THAN OR EQUAL TO 100.0 µg/L



Location

Well

Well Screen
and Data Value

Groundwater surface

3D plume hull of Total Haloethers
greater than or equal to 100.0 µg/L

NOTES:
1. HSU = Hydrostratigraphic Unit
2. µg/L = micrograms per liter
3. Groundwater data (µg/L) displayed as tubes
4. Non-detect data modeled at ½ the Reporting Limit
5. Vertical Exaggeration = 20x
6. Edge of modeled potentiometric surface shown as purple line.

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TOTAL HALOETHERS IN GROUNDWATER
3D PLUME LOOKING NORTHEAST
(NOV. 2017 - JAN. 2018)

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FIGURE
35

APPENDIX A

Laboratory Analytical Data Packages (on CD)

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

November 21, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2065329

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on November 15, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2065329

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2065329

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2065329001	**TB-20171107**	Water	11/07/17 00:00	11/15/17 10:00
2065329002	**EB-20171108**	Water	11/08/17 09:09	11/15/17 10:00
2065329003	**FB-20171108**	Water	11/08/17 10:17	11/15/17 10:00
2065329004	**FMW-5-90-BP**	Water	11/08/17 12:31	11/15/17 10:00
2065329005	**EB-20171109**	Water	11/09/17 08:20	11/15/17 10:00
2065329006	**FB-20171109**	Water	11/09/17 10:04	11/15/17 10:00
2065329007	**MW-1C-1BR-A-BP**	Water	11/09/17 12:31	11/15/17 10:00
2065329008	**EB-20171110**	Water	11/10/17 08:55	11/15/17 10:00
2065329009	**FB-20171110**	Water	11/10/17 09:46	11/15/17 10:00
2065329010	**MW-4B-1BR-BP**	Water	11/10/17 11:20	11/15/17 10:00
2065329011	**MW-4B-3-BP**	Water	11/10/17 12:38	11/15/17 10:00

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2065329

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2065329001	**TB-20171107**	EPA 5030B/8260	JRP	56	PASI-N
2065329002	**EB-20171108**	EPA 5030B/8260	JRP	56	PASI-N
2065329003	**FB-20171108**	EPA 5030B/8260	JRP	56	PASI-N
2065329004	**FMW-5-90-BP**	EPA 5030B/8260	JRP	56	PASI-N
2065329005	**EB-20171109**	EPA 5030B/8260	JRP	56	PASI-N
2065329006	**FB-20171109**	EPA 5030B/8260	JRP	56	PASI-N
2065329007	**MW-1C-1BR-A-BP**	EPA 5030B/8260	JRP	56	PASI-N
2065329008	**EB-20171110**	EPA 5030B/8260	JRP	56	PASI-N
2065329009	**FB-20171110**	EPA 5030B/8260	JRP	56	PASI-N
2065329010	**MW-4B-1BR-BP**	EPA 5030B/8260	JRP	56	PASI-N
2065329011	**MW-4B-3-BP**	EPA 5030B/8260	JRP	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2065329

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: November 21, 2017

General Information:
11 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 94780

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2065329011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 407705)
  - 1,1,2-Trichlorotrifluoroethane
  - Haloether 406
  - Haloether 427
- MSD (Lab ID: 407706)
  - 1,1,2-Trichlorotrifluoroethane
  - Haloether 406

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: TB-20171107 **Lab ID: 2065329001** Collected: 11/07/17 00:00 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 11:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 11:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 11:49	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 11:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 11:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 11:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 11:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 11:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 11:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 11:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 11:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 11:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 11:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 11:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 11:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 11:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 11:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 11:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 11:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 11:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 11:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 406	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 421	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 427	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 428	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 508	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 528	ND	ug/L	1.0	1		11/17/17 11:49		
Halomar	ND	ug/L	1.0	1		11/17/17 11:49		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 11:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 11:49		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 11:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 11:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 11:49	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 11:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 11:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 11:49	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 11:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 11:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: TB-20171107 **Lab ID: 2065329001** Collected: 11/07/17 00:00 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 11:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 11:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 11:49	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 11:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 11:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 11:49	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 11:49	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 11:49	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		11/17/17 11:49	1868-53-7	

Sample: EB-20171108 **Lab ID: 2065329002** Collected: 11/08/17 09:09 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 12:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 12:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 12:07	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 12:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 12:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 12:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 12:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 12:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 12:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 12:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 12:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 12:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 12:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 12:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 12:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 12:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 12:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 12:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 12:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 406	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 421	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 427	ND	ug/L	1.0	1		11/17/17 12:07		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: EB-20171108 **Lab ID: 2065329002** Collected: 11/08/17 09:09 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 508	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 528	ND	ug/L	1.0	1		11/17/17 12:07		
Halomar	ND	ug/L	1.0	1		11/17/17 12:07		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 12:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 12:07		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 12:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 12:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 12:07	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 12:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 12:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 12:07	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 12:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 12:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 12:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 12:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 12:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 12:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 12:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 12:07	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 12:07	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/17/17 12:07	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		11/17/17 12:07	1868-53-7	

Sample: FB-20171108 **Lab ID: 2065329003** Collected: 11/08/17 10:17 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 12:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 12:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 12:25	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 12:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 12:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 12:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 12:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 12:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 12:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 12:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 12:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 12:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 12:25	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FB-20171108 **Lab ID: 2065329003** Collected: 11/08/17 10:17 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/17/17 12:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 12:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 12:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 12:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 12:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 12:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 406	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 421	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 427	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 428	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 508	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 528	ND	ug/L	1.0	1		11/17/17 12:25		
Halomar	ND	ug/L	1.0	1		11/17/17 12:25		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 12:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 12:25		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 12:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 12:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 12:25	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 12:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 12:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 12:25	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 12:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 12:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 12:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 12:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 12:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 12:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 12:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 12:25	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 12:25	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 12:25	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		11/17/17 12:25	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FMW-5-90-BP **Lab ID: 2065329004** Collected: 11/08/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/18/17 12:52	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/18/17 12:52	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/18/17 12:52	107-13-1	
Benzene	ND	ug/L	1.0	1		11/18/17 12:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/18/17 12:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/18/17 12:52	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/18/17 12:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/18/17 12:52	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/18/17 12:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/18/17 12:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/18/17 12:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/18/17 12:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/18/17 12:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/18/17 12:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/18/17 12:52	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/18/17 12:52	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/18/17 12:52	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	1		11/18/17 12:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 12:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/18/17 12:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 12:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 12:52	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/18/17 12:52	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/18/17 12:52	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 406	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 421	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 427	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 428	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 508	**123**	ug/L	1.0	1		11/18/17 12:52		
Haloether 528	ND	ug/L	1.0	1		11/18/17 12:52		
Halomar	ND	ug/L	1.0	1		11/18/17 12:52		
2-Hexanone	ND	ug/L	2.0	1		11/18/17 12:52	591-78-6	
Isoflurane	**10.5**	ug/L	1.0	1		11/18/17 12:52		
Methoxyflurane	ND	ug/L	1.0	1		11/18/17 12:52	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/18/17 12:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/18/17 12:52	108-10-1	
Styrene	ND	ug/L	1.0	1		11/18/17 12:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/18/17 12:52	79-34-5	
Tetrachloroethene	**5.0**	ug/L	1.0	1		11/18/17 12:52	127-18-4	
Toluene	ND	ug/L	1.0	1		11/18/17 12:52	108-88-3	
Total Haloether	**134**	ug/L	1.0	1		11/18/17 12:52		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/18/17 12:52	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FMW-5-90-BP **Lab ID: 2065329004** Collected: 11/08/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/18/17 12:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/18/17 12:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/18/17 12:52	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/18/17 12:52	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/18/17 12:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/18/17 12:52	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/18/17 12:52	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/18/17 12:52	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		11/18/17 12:52	1868-53-7	

Sample: EB-20171109 **Lab ID: 2065329005** Collected: 11/09/17 08:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 12:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 12:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 12:43	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 12:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 12:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 12:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 12:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 12:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 12:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 12:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 12:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 12:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 12:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 12:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 12:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 12:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 12:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 12:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 12:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 406	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 421	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 427	ND	ug/L	1.0	1		11/17/17 12:43		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: EB-20171109 **Lab ID: 2065329005** Collected: 11/09/17 08:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 508	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 528	ND	ug/L	1.0	1		11/17/17 12:43		
Halomar	ND	ug/L	1.0	1		11/17/17 12:43		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 12:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 12:43		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 12:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 12:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 12:43	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 12:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 12:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 12:43	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 12:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 12:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 12:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 12:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 12:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 12:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 12:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 12:43	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 12:43	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 12:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/17/17 12:43	1868-53-7	

Sample: FB-20171109 **Lab ID: 2065329006** Collected: 11/09/17 10:04 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 13:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:00	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 13:00	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FB-20171109 **Lab ID: 2065329006** Collected: 11/09/17 10:04 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 13:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 508	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 528	ND	ug/L	1.0	1		11/17/17 13:00		
Halomar	ND	ug/L	1.0	1		11/17/17 13:00		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:00	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 13:00		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 13:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:00	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 13:00	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:00	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 13:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 13:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:00	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 13:00	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 13:00	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/17/17 13:00	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-1C-1BR-A-BP **Lab ID: 2065329007** Collected: 11/09/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/18/17 13:10	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/18/17 13:10	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/18/17 13:10	107-13-1	
Benzene	ND	ug/L	1.0	1		11/18/17 13:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/18/17 13:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/18/17 13:10	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/18/17 13:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/18/17 13:10	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/18/17 13:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/18/17 13:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/18/17 13:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/18/17 13:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/18/17 13:10	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/18/17 13:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/18/17 13:10	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/18/17 13:10	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:10	75-35-4	
cis-1,2-Dichloroethene	**3.2**	ug/L	1.0	1		11/18/17 13:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/18/17 13:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:10	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/18/17 13:10	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/18/17 13:10	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 406	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 421	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 427	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 428	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 508	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 528	ND	ug/L	1.0	1		11/18/17 13:10		
Halomar	ND	ug/L	1.0	1		11/18/17 13:10		
2-Hexanone	ND	ug/L	2.0	1		11/18/17 13:10	591-78-6	
Isoflurane	**9.5**	ug/L	1.0	1		11/18/17 13:10		
Methoxyflurane	ND	ug/L	1.0	1		11/18/17 13:10	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/18/17 13:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/18/17 13:10	108-10-1	
Styrene	ND	ug/L	1.0	1		11/18/17 13:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/18/17 13:10	79-34-5	
Tetrachloroethene	**16.6**	ug/L	1.0	1		11/18/17 13:10	127-18-4	
Toluene	ND	ug/L	1.0	1		11/18/17 13:10	108-88-3	
Total Haloether	**9.5**	ug/L	1.0	1		11/18/17 13:10		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/18/17 13:10	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-1C-1BR-A-BP **Lab ID: 2065329007** Collected: 11/09/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/18/17 13:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/18/17 13:10	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/18/17 13:10	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/18/17 13:10	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/18/17 13:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/18/17 13:10	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/18/17 13:10	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		11/18/17 13:10	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		11/18/17 13:10	1868-53-7	

Sample: EB-20171110 **Lab ID: 2065329008** Collected: 11/10/17 08:55 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 13:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:18	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 13:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 13:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:18	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:18		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: EB-20171110 **Lab ID: 2065329008** Collected: 11/10/17 08:55 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 508	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 528	ND	ug/L	1.0	1		11/17/17 13:18		
Halomar	ND	ug/L	1.0	1		11/17/17 13:18		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:18	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 13:18		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 13:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:18	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 13:18	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:18	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 13:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 13:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:18	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 13:18	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 13:18	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/17/17 13:18	1868-53-7	

Sample: FB-20171110 **Lab ID: 2065329009** Collected: 11/10/17 09:46 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.5**	ug/L	4.0	1		11/17/17 13:37	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:37	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:37	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:37	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:37	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 13:37	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FB-20171110 **Lab ID: 2065329009** Collected: 11/10/17 09:46 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:37	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:37	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:37	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 13:37	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:37	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 508	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 528	ND	ug/L	1.0	1		11/17/17 13:37		
Halomar	ND	ug/L	1.0	1		11/17/17 13:37		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:37	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 13:37		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 13:37	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:37	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 13:37	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:37	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 13:37		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 13:37	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:37	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:37	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 13:37	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 13:37	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		11/17/17 13:37	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-4B-1BR-BP **Lab ID: 2065329010** Collected: 11/10/17 11:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/18/17 13:28	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/18/17 13:28	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/18/17 13:28	107-13-1	
Benzene	ND	ug/L	1.0	1		11/18/17 13:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/18/17 13:28	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/18/17 13:28	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/18/17 13:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/18/17 13:28	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/18/17 13:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/18/17 13:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/18/17 13:28	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/18/17 13:28	75-00-3	
Chloroform	**1.4**	ug/L	1.0	1		11/18/17 13:28	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/18/17 13:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/18/17 13:28	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/18/17 13:28	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/18/17 13:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:28	10061-02-6	
Enflurane	**7.4**	ug/L	1.0	1		11/18/17 13:28	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/18/17 13:28	100-41-4	
Haloether 229	**35.5**	ug/L	1.0	1		11/18/17 13:28		
Haloether 406	**1.5**	ug/L	1.0	1		11/18/17 13:28		
Haloether 421	ND	ug/L	1.0	1		11/18/17 13:28		
Haloether 427	ND	ug/L	1.0	1		11/18/17 13:28		
Haloether 428	ND	ug/L	1.0	1		11/18/17 13:28		
Haloether 508	**146**	ug/L	1.0	1		11/18/17 13:28		
Haloether 528	ND	ug/L	1.0	1		11/18/17 13:28		
Halomar	**6.1**	ug/L	1.0	1		11/18/17 13:28		
2-Hexanone	ND	ug/L	2.0	1		11/18/17 13:28	591-78-6	
Isoflurane	**103**	ug/L	1.0	1		11/18/17 13:28		
Methoxyflurane	**1.7**	ug/L	1.0	1		11/18/17 13:28	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/18/17 13:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/18/17 13:28	108-10-1	
Styrene	ND	ug/L	1.0	1		11/18/17 13:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/18/17 13:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/18/17 13:28	127-18-4	
Toluene	ND	ug/L	1.0	1		11/18/17 13:28	108-88-3	
Total Haloether	**301**	ug/L	1.0	1		11/18/17 13:28		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-4B-1BR-BP **Lab ID: 2065329010** Collected: 11/10/17 11:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/18/17 13:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/18/17 13:28	96-18-4	
1,1,2-Trichlorotrifluoroethane	**4.8**	ug/L	1.0	1		11/18/17 13:28	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/18/17 13:28	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/18/17 13:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/18/17 13:28	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		11/18/17 13:28	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		11/18/17 13:28	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/18/17 13:28	1868-53-7	

Sample: MW-4B-3-BP **Lab ID: 2065329011** Collected: 11/10/17 12:38 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 13:55	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:55	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:55	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:55	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:55	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:55	75-00-3	
Chloroform	**1.0**	ug/L	1.0	1		11/17/17 13:55	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:55	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:55	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:55	75-35-4	
cis-1,2-Dichloroethene	**1.2**	ug/L	1.0	1		11/17/17 13:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:55	10061-02-6	
Enflurane	**6.4**	ug/L	1.0	1		11/17/17 13:55	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:55	100-41-4	
Haloether 229	**11.0**	ug/L	1.0	1		11/17/17 13:55		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:55		M1
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:55		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:55		M1

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-4B-3-BP **Lab ID: 2065329011** Collected: 11/10/17 12:38 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:55		
Haloether 508	**145**	ug/L	2.0	2		11/18/17 13:46		
Haloether 528	**3.8**	ug/L	1.0	1		11/17/17 13:55		
Halomar	**4.4**	ug/L	1.0	1		11/17/17 13:55		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:55	591-78-6	
Isoflurane	**58.1**	ug/L	1.0	1		11/17/17 13:55		
Methoxyflurane	**1.2**	ug/L	1.0	1		11/17/17 13:55	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:55	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:55	79-34-5	
Tetrachloroethene	**12.6**	ug/L	1.0	1		11/17/17 13:55	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:55	108-88-3	
Total Haloether	**229**	ug/L	2.0	2		11/18/17 13:46		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	**5.5**	ug/L	1.0	1		11/17/17 13:55	76-13-1	M1
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:55	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:55	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 13:55	2037-26-5	
Toluene-d8 (S)	101	%.	79-119	2		11/18/17 13:46	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	2		11/18/17 13:46	460-00-4	
4-Bromofluorobenzene (S)	101	%.	68-124	1		11/17/17 13:55	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	2		11/18/17 13:46	1868-53-7	
Dibromofluoromethane (S)	101	%.	72-126	1		11/17/17 13:55	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065329

QC Batch: 94780 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2065329001, 2065329002, 2065329003, 2065329004, 2065329005, 2065329006, 2065329007, 2065329008, 2065329009, 2065329010, 2065329011

METHOD BLANK: 407703 | Matrix: Water
Associated Lab Samples: 2065329001, 2065329002, 2065329003, 2065329004, 2065329005, 2065329006, 2065329007, 2065329008, 2065329009, 2065329010, 2065329011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	11/17/17 10:20	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/17/17 10:20	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/17/17 10:20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	11/17/17 10:20	
1,1-Dichloroethane	ug/L	ND	1.0	11/17/17 10:20	
1,1-Dichloroethene	ug/L	ND	1.0	11/17/17 10:20	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/17/17 10:20	
1,2-Dichloroethane	ug/L	ND	1.0	11/17/17 10:20	
1,2-Dichloropropane	ug/L	ND	1.0	11/17/17 10:20	
2-Butanone (MEK)	ug/L	ND	2.0	11/17/17 10:20	
2-Hexanone	ug/L	ND	2.0	11/17/17 10:20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	11/17/17 10:20	
Acetone	ug/L	ND	4.0	11/17/17 10:20	
Acrolein	ug/L	ND	8.0	11/17/17 10:20	
Acrylonitrile	ug/L	ND	4.0	11/17/17 10:20	
Benzene	ug/L	ND	1.0	11/17/17 10:20	
Bromodichloromethane	ug/L	ND	1.0	11/17/17 10:20	
Bromoform	ug/L	ND	1.0	11/17/17 10:20	
Bromomethane	ug/L	ND	1.0	11/17/17 10:20	
Carbon disulfide	ug/L	ND	1.0	11/17/17 10:20	
Carbon tetrachloride	ug/L	ND	1.0	11/17/17 10:20	
Chlorobenzene	ug/L	ND	1.0	11/17/17 10:20	
Chloroethane	ug/L	ND	1.0	11/17/17 10:20	
Chloroform	ug/L	ND	1.0	11/17/17 10:20	
Chloromethane	ug/L	ND	1.0	11/17/17 10:20	
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/17/17 10:20	
cis-1,3-Dichloropropene	ug/L	ND	1.0	11/17/17 10:20	
Dibromochloromethane	ug/L	ND	1.0	11/17/17 10:20	
Dibromomethane	ug/L	ND	1.0	11/17/17 10:20	
Enflurane	ug/L	ND	1.0	11/17/17 10:20	
Ethylbenzene	ug/L	ND	1.0	11/17/17 10:20	
Haloether 229	ug/L	ND	1.0	11/17/17 10:20	
Haloether 406	ug/L	ND	1.0	11/17/17 10:20	
Haloether 421	ug/L	ND	1.0	11/17/17 10:20	
Haloether 427	ug/L	ND	1.0	11/17/17 10:20	
Haloether 428	ug/L	ND	1.0	11/17/17 10:20	
Haloether 508	ug/L	ND	1.0	11/17/17 10:20	
Haloether 528	ug/L	ND	1.0	11/17/17 10:20	
Halomar	ug/L	ND	1.0	11/17/17 10:20	
Isoflurane	ug/L	ND	1.0	11/17/17 10:20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065329

METHOD BLANK: 407703 Matrix: Water

Associated Lab Samples: 2065329001, 2065329002, 2065329003, 2065329004, 2065329005, 2065329006, 2065329007, 2065329008, 2065329009, 2065329010, 2065329011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	11/17/17 10:20	
Methoxyflurane	ug/L	ND	1.0	11/17/17 10:20	
Methylene Chloride	ug/L	ND	5.0	11/17/17 10:20	
o-Xylene	ug/L	ND	1.0	11/17/17 10:20	
Styrene	ug/L	ND	1.0	11/17/17 10:20	
Tetrachloroethene	ug/L	ND	1.0	11/17/17 10:20	
Toluene	ug/L	ND	1.0	11/17/17 10:20	
Total Haloether	ug/L	ND	1.0	11/17/17 10:20	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/17/17 10:20	
trans-1,3-Dichloropropene	ug/L	ND	1.0	11/17/17 10:20	
Trichloroethene	ug/L	ND	1.0	11/17/17 10:20	
Trichlorofluoromethane	ug/L	ND	1.0	11/17/17 10:20	
Vinyl chloride	ug/L	ND	1.0	11/17/17 10:20	
4-Bromofluorobenzene (S)	%.	102	68-124	11/17/17 10:20	
Dibromofluoromethane (S)	%.	101	72-126	11/17/17 10:20	
Toluene-d8 (S)	%.	102	79-119	11/17/17 10:20	

METHOD BLANK: 408205 Matrix: Water

Associated Lab Samples: 2065329001, 2065329002, 2065329003, 2065329004, 2065329005, 2065329006, 2065329007, 2065329008, 2065329009, 2065329010, 2065329011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	11/18/17 11:03	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/18/17 11:03	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/18/17 11:03	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	11/18/17 11:03	
1,1-Dichloroethane	ug/L	ND	1.0	11/18/17 11:03	
1,1-Dichloroethene	ug/L	ND	1.0	11/18/17 11:03	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/18/17 11:03	
1,2-Dichloroethane	ug/L	ND	1.0	11/18/17 11:03	
1,2-Dichloropropane	ug/L	ND	1.0	11/18/17 11:03	
2-Butanone (MEK)	ug/L	ND	2.0	11/18/17 11:03	
2-Hexanone	ug/L	ND	2.0	11/18/17 11:03	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	11/18/17 11:03	
Acetone	ug/L	ND	4.0	11/18/17 11:03	
Acrolein	ug/L	ND	8.0	11/18/17 11:03	
Acrylonitrile	ug/L	ND	4.0	11/18/17 11:03	
Benzene	ug/L	ND	1.0	11/18/17 11:03	
Bromodichloromethane	ug/L	ND	1.0	11/18/17 11:03	
Bromoform	ug/L	ND	1.0	11/18/17 11:03	
Bromomethane	ug/L	ND	1.0	11/18/17 11:03	
Carbon disulfide	ug/L	ND	1.0	11/18/17 11:03	
Carbon tetrachloride	ug/L	ND	1.0	11/18/17 11:03	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065329

METHOD BLANK: 408205 Matrix: Water

Associated Lab Samples: 2065329001, 2065329002, 2065329003, 2065329004, 2065329005, 2065329006, 2065329007, 2065329008, 2065329009, 2065329010, 2065329011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/L	ND	1.0	11/18/17 11:03	
Chloroethane	ug/L	ND	1.0	11/18/17 11:03	
Chloroform	ug/L	ND	1.0	11/18/17 11:03	
Chloromethane	ug/L	ND	1.0	11/18/17 11:03	
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/18/17 11:03	
cis-1,3-Dichloropropene	ug/L	ND	1.0	11/18/17 11:03	
Dibromochloromethane	ug/L	ND	1.0	11/18/17 11:03	
Dibromomethane	ug/L	ND	1.0	11/18/17 11:03	
Enflurane	ug/L	ND	1.0	11/18/17 11:03	
Ethylbenzene	ug/L	ND	1.0	11/18/17 11:03	
Haloether 229	ug/L	ND	1.0	11/18/17 11:03	
Haloether 406	ug/L	ND	1.0	11/18/17 11:03	
Haloether 421	ug/L	ND	1.0	11/18/17 11:03	
Haloether 427	ug/L	ND	1.0	11/18/17 11:03	
Haloether 428	ug/L	ND	1.0	11/18/17 11:03	
Haloether 508	ug/L	ND	1.0	11/18/17 11:03	
Haloether 528	ug/L	ND	1.0	11/18/17 11:03	
Halomar	ug/L	ND	1.0	11/18/17 11:03	
Isoflurane	ug/L	ND	1.0	11/18/17 11:03	
m&p-Xylene	ug/L	ND	2.0	11/18/17 11:03	
Methoxyflurane	ug/L	ND	1.0	11/18/17 11:03	
Methylene Chloride	ug/L	ND	5.0	11/18/17 11:03	
o-Xylene	ug/L	ND	1.0	11/18/17 11:03	
Styrene	ug/L	ND	1.0	11/18/17 11:03	
Tetrachloroethene	ug/L	ND	1.0	11/18/17 11:03	
Toluene	ug/L	ND	1.0	11/18/17 11:03	
Total Haloether	ug/L	ND	1.0	11/18/17 11:03	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/18/17 11:03	
trans-1,3-Dichloropropene	ug/L	ND	1.0	11/18/17 11:03	
Trichloroethene	ug/L	ND	1.0	11/18/17 11:03	
Trichlorofluoromethane	ug/L	ND	1.0	11/18/17 11:03	
Vinyl chloride	ug/L	ND	1.0	11/18/17 11:03	
4-Bromofluorobenzene (S)	%.	103	68-124	11/18/17 11:03	
Dibromofluoromethane (S)	%.	100	72-126	11/18/17 11:03	
Toluene-d8 (S)	%.	102	79-119	11/18/17 11:03	

LABORATORY CONTROL SAMPLE: 407704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.0	100	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	48.8	98	15-179	
1,1,2-Trichloroethane	ug/L	50	46.9	94	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	48.1	96	38-121	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065329

LABORATORY CONTROL SAMPLE: 407704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	50	50.1	100	63-129	
1,1-Dichloroethene	ug/L	50	47.3	95	51-139	
1,2,3-Trichloropropane	ug/L	50	48.9	98	13-187	
1,2-Dichloroethane	ug/L	50	47.5	95	57-148	
1,2-Dichloropropane	ug/L	50	48.9	98	66-128	
2-Butanone (MEK)	ug/L	50	47.6	95	32-183	
2-Hexanone	ug/L	50	48.8	98	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	46.6	93	26-171	
Acetone	ug/L	50	53.0	106	22-165	
Acrolein	ug/L	50	52.0	104	10-131	
Acrylonitrile	ug/L	50	47.7	95	18-149	
Benzene	ug/L	50	47.6	95	62-131	
Bromodichloromethane	ug/L	50	50.2	100	69-132	
Bromoform	ug/L	50	46.3	93	35-166	
Bromomethane	ug/L	50	43.8	88	34-158	
Carbon disulfide	ug/L	50	50.1	100	31-128	
Carbon tetrachloride	ug/L	50	50.9	102	54-144	
Chlorobenzene	ug/L	50	47.7	95	70-127	
Chloroethane	ug/L	50	44.8	90	17-195	
Chloroform	ug/L	50	47.0	94	73-134	
Chloromethane	ug/L	50	50.3	101	17-153	
cis-1,2-Dichloroethene	ug/L	50	48.7	97	68-129	
cis-1,3-Dichloropropene	ug/L	50	50.2	100	72-138	
Dibromochloromethane	ug/L	50	45.4	91	49-146	
Dibromomethane	ug/L	50	50.3	101	56-145	
Enflurane	ug/L	50	48.2	96	56-135	
Ethylbenzene	ug/L	50	48.4	97	66-126	
Haloether 229	ug/L	50	47.6	95	62-123	
Haloether 406	ug/L	50	51.7	103	62-134	
Haloether 421	ug/L	50	47.1	94	70-128	
Haloether 427	ug/L	50	49.4	99	69-153	
Haloether 428	ug/L	50	49.2	98	70-134	
Haloether 508	ug/L	50	49.5	99	52-139	
Haloether 528	ug/L	50	51.0	102	48-157	
Halomar	ug/L	50	47.8	96	62-128	
Isoflurane	ug/L	50	46.0	92	61-132	
m&p-Xylene	ug/L	100	93.2	93	65-129	
Methoxyflurane	ug/L	50	47.9	96	72-124	
Methylene Chloride	ug/L	50	48.5	97	46-168	
o-Xylene	ug/L	50	47.5	95	65-124	
Styrene	ug/L	50	48.6	97	72-133	
Tetrachloroethene	ug/L	50	51.8	104	46-157	
Toluene	ug/L	50	48.0	96	69-126	
Total Haloether	ug/L		535			
trans-1,2-Dichloroethene	ug/L	50	51.4	103	60-129	
trans-1,3-Dichloropropene	ug/L	50	47.8	96	59-149	
Trichloroethene	ug/L	50	49.8	100	67-132	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065329

LABORATORY CONTROL SAMPLE: 407704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichlorofluoromethane	ug/L	50	55.6	111	39-171	
Vinyl chloride	ug/L	50	46.4	93	27-149	
4-Bromofluorobenzene (S)	%.			99	68-124	
Dibromofluoromethane (S)	%.			99	72-126	
Toluene-d8 (S)	%.			100	79-119	

LABORATORY CONTROL SAMPLE: 408206

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.8	100	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	48.8	98	15-179	
1,1,2-Trichloroethane	ug/L	50	48.3	97	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	44.1	88	38-121	
1,1-Dichloroethane	ug/L	50	47.5	95	63-129	
1,1-Dichloroethene	ug/L	50	43.6	87	51-139	
1,2,3-Trichloropropane	ug/L	50	51.4	103	13-187	
1,2-Dichloroethane	ug/L	50	50.6	101	57-148	
1,2-Dichloropropane	ug/L	50	50.8	102	66-128	
2-Butanone (MEK)	ug/L	50	49.5	99	32-183	
2-Hexanone	ug/L	50	53.8	108	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	51.7	103	26-171	
Acetone	ug/L	50	53.8	108	22-165	
Acrolein	ug/L	50	54.3	109	10-131	
Acrylonitrile	ug/L	50	45.7	91	18-149	
Benzene	ug/L	50	45.3	91	62-131	
Bromodichloromethane	ug/L	50	51.6	103	69-132	
Bromoform	ug/L	50	50.5	101	35-166	
Bromomethane	ug/L	50	43.4	87	34-158	
Carbon disulfide	ug/L	50	42.6	85	31-128	
Carbon tetrachloride	ug/L	50	52.2	104	54-144	
Chlorobenzene	ug/L	50	46.9	94	70-127	
Chloroethane	ug/L	50	42.7	85	17-195	
Chloroform	ug/L	50	46.4	93	73-134	
Chloromethane	ug/L	50	41.1	82	17-153	
cis-1,2-Dichloroethene	ug/L	50	44.3	89	68-129	
cis-1,3-Dichloropropene	ug/L	50	50.9	102	72-138	
Dibromochloromethane	ug/L	50	49.2	98	49-146	
Dibromomethane	ug/L	50	52.0	104	56-145	
Enflurane	ug/L	50	45.8	92	56-135	
Ethylbenzene	ug/L	50	48.8	98	66-126	
Haloether 229	ug/L	50	49.7	99	62-123	
Haloether 406	ug/L	50	50.2	100	62-134	
Haloether 421	ug/L	50	48.8	98	70-128	
Haloether 427	ug/L	50	51.6	103	69-153	
Haloether 428	ug/L	50	52.2	104	70-134	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065329

LABORATORY CONTROL SAMPLE: 408206

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Haloether 508	ug/L	50	46.4	93	52-139	
Haloether 528	ug/L	50	42.8	86	48-157	
Halomar	ug/L	50	44.4	89	62-128	
Isoflurane	ug/L	50	44.6	89	61-132	
m&p-Xylene	ug/L	100	96.6	97	65-129	
Methoxyflurane	ug/L	50	47.8	96	72-124	
Methylene Chloride	ug/L	50	45.6	91	46-168	
o-Xylene	ug/L	50	49.3	99	65-124	
Styrene	ug/L	50	48.3	97	72-133	
Tetrachloroethene	ug/L	50	49.2	98	46-157	
Toluene	ug/L	50	49.7	99	69-126	
Total Haloether	ug/L		524			
trans-1,2-Dichloroethene	ug/L	50	46.8	94	60-129	
trans-1,3-Dichloropropene	ug/L	50	51.8	104	59-149	
Trichloroethene	ug/L	50	51.1	102	67-132	
Trichlorofluoromethane	ug/L	50	52.7	105	39-171	
Vinyl chloride	ug/L	50	41.7	83	27-149	
4-Bromofluorobenzene (S)	%.			97	68-124	
Dibromofluoromethane (S)	%.			96	72-126	
Toluene-d8 (S)	%.			100	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 407705 407706

Parameter	Units	2065329011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	56.2	54.6	112	109	54-137	3	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	49.5	50.0	99	100	15-187	1	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	50.3	50.5	101	101	59-148	0	20	
1,1,2-Trichlorotrifluoroethane	ug/L	5.5	50	50	66.3	67.1	122	123	40-117	1	20	M1
1,1-Dichloroethane	ug/L	ND	50	50	55.4	53.9	111	108	59-133	3	20	
1,1-Dichloroethene	ug/L	ND	50	50	55.1	55.9	110	112	44-146	2	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	46.8	49.0	94	98	14-199	5	20	
1,2-Dichloroethane	ug/L	ND	50	50	49.1	49.0	98	98	56-154	0	20	
1,2-Dichloropropane	ug/L	ND	50	50	53.1	52.8	106	106	62-135	0	20	
2-Butanone (MEK)	ug/L	ND	50	50	45.5	47.5	91	95	20-205	4	20	
2-Hexanone	ug/L	ND	50	50	47.6	51.5	95	103	25-189	8	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	47.2	48.5	94	97	23-184	3	20	
Acetone	ug/L	ND	50	50	52.7	57.0	105	114	11-217	8	20	
Acrolein	ug/L	ND	50	50	56.0	57.5	112	115	10-142	3	20	
Acrylonitrile	ug/L	ND	50	50	48.3	49.6	97	99	20-164	3	20	
Benzene	ug/L	ND	50	50	52.6	51.9	105	104	52-141	1	20	
Bromodichloromethane	ug/L	ND	50	50	52.5	50.8	105	102	70-134	3	20	
Bromoform	ug/L	ND	50	50	48.5	50.0	97	100	37-171	3	20	
Bromomethane	ug/L	ND	50	50	50.3	49.9	101	100	34-155	1	20	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065329

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 407705 407706

Parameter	Units	2065329011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Carbon disulfide	ug/L	ND	50	50	60.5	58.3	121	117	28-130	4	20	
Carbon tetrachloride	ug/L	ND	50	50	59.3	57.1	117	113	48-146	4	20	
Chlorobenzene	ug/L	ND	50	50	51.3	50.8	103	102	67-129	1	20	
Chloroethane	ug/L	ND	50	50	51.0	49.6	102	99	12-192	3	20	
Chloroform	ug/L	1.0	50	50	51.3	51.1	101	100	66-143	0	20	
Chloromethane	ug/L	ND	50	50	57.7	57.0	115	114	14-155	1	20	
cis-1,2-Dichloroethene	ug/L	1.2	50	50	52.7	53.2	103	104	56-141	1	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.0	52.8	108	106	70-139	2	20	
Dibromochloromethane	ug/L	ND	50	50	48.2	48.6	96	97	50-150	1	20	
Dibromomethane	ug/L	ND	50	50	51.0	51.1	102	102	58-153	0	20	
Enflurane	ug/L	6.4	50	50	64.0	63.6	115	114	63-126	1	20	
Ethylbenzene	ug/L	ND	50	50	53.4	52.7	107	105	57-135	1	20	
Haloether 229	ug/L	11.0	50	50	69.9	69.9	118	118	56-127	0	20	
Haloether 406	ug/L	ND	50	50	67.0	67.7	134	135	68-128	1	20	M1
Haloether 421	ug/L	ND	50	50	54.3	52.0	109	104	74-120	4	20	
Haloether 427	ug/L	ND	50	50	62.1	58.3	124	117	78-120	6	20	M1
Haloether 428	ug/L	ND	50	50	60.8	57.4	122	115	74-125	6	20	
Haloether 508	ug/L	145	50	50	283	278	276	267	28-156	2	20	
Haloether 528	ug/L	3.8	50	50	47.3	50.8	87	94	45-142	7	20	
Halomar	ug/L	4.4	50	50	58.2	58.3	108	108	67-123	0	20	
Isoflurane	ug/L	58.1	50	50	112	111	109	107	45-140	1	20	
m&p-Xylene	ug/L	ND	100	100	102	101	102	101	56-136	2	20	
Methoxyflurane	ug/L	1.2	50	50	55.0	52.9	108	103	75-119	4	20	
Methylene Chloride	ug/L	ND	50	50	51.7	52.0	103	104	45-166	1	20	
o-Xylene	ug/L	ND	50	50	52.3	51.7	105	103	57-133	1	20	
Styrene	ug/L	ND	50	50	53.3	53.5	107	107	58-144	0	20	
Tetrachloroethene	ug/L	12.6	50	50	70.2	70.0	115	115	48-143	0	20	
Toluene	ug/L	ND	50	50	53.4	51.6	107	103	59-136	3	20	
Total Haloether	ug/L	229			933	920				1		
trans-1,2-Dichloroethene	ug/L	ND	50	50	59.9	59.4	120	119	57-132	1	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	49.8	51.4	100	103	59-154	3	20	
Trichloroethene	ug/L	ND	50	50	56.5	52.5	112	104	58-140	7	20	
Trichlorofluoromethane	ug/L	ND	50	50	68.5	67.1	137	134	24-175	2	20	
Vinyl chloride	ug/L	ND	50	50	57.3	55.7	115	111	21-150	3	20	
4-Bromofluorobenzene (S)	%.						98	99	68-124			
Dibromofluoromethane (S)	%.						101	101	72-126			
Toluene-d8 (S)	%.						101	100	79-119			

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2065329

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2065329

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2065329001	**TB-20171107**	EPA 5030B/8260	94780		
2065329002	**EB-20171108**	EPA 5030B/8260	94780		
2065329003	**FB-20171108**	EPA 5030B/8260	94780		
2065329004	**FMW-5-90-BP**	EPA 5030B/8260	94780		
2065329005	**EB-20171109**	EPA 5030B/8260	94780		
2065329006	**FB-20171109**	EPA 5030B/8260	94780		
2065329007	**MW-1C-1BR-A-BP**	EPA 5030B/8260	94780		
2065329008	**EB-20171110**	EPA 5030B/8260	94780		
2065329009	**FB-20171110**	EPA 5030B/8260	94780		
2065329010	**MW-4B-1BR-BP**	EPA 5030B/8260	94780		
2065329011	**MW-4B-3-BP**	EPA 5030B/8260	94780		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical R

The Chain-of-Custody is a LEGAL DOCUMENT. All rel

WO# : 2065329

2065329

1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ARCADIS	Report To: David Howard	Attention:
Address: 410 North 44th St.	Copy To:	Company Name:
Phoenix, AZ 85008		Address:
Email: david.howard@arcadis-us.com	Purchase Order #:	Pace Quote:
Phone: NONE Fax:	Project Name: Fibers	Pace Project Manager: justin.stock@pacelabs.com,
Requested Due Date:	Project #: C0001913.0005.1702B	Pace Profile #: 1037

Regulatory Agency	State / Location
	PR

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	8260- VOCs + Halos	Trip BLANK	Residual Chlorine (Y/N)
1	TB-20171107	WT	G			11/07/17	LAB		2				X							X	
2	EB-20171108	WT	G			11/08/17	0909		3				3						X		
3	FB-20171108	WT	G			11/08/17	1017		3				3						X		
4	FMW-5-90-BD	WT	G			11/08/17	1231		3				3						X		
5	EB-20171109	WT	G			11/09/17	0820		3				3						X		
6	FB-20171109	WT	G			11/09/17	1004		3				3						X		
7	MW-1C-1BRA-BD	WT	G			11/09/17	1231		3				3						X		
8	EB-20171110	WT	G			11/10/17	0555		3				3						X		
9	FB-20171110	WT	G			11/10/17	0946		3				3						X		
10	MW-4B-1BP	WT	G			11/10/17	1120		3				3						X		
11	MW-4B-3BP	WT	G			11/10/17	1238		3				3						X		
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andy Colson / Arcadis	11/10/17	1558	[illegible] / Pace	11-10-17	15:58	
	[illegible] / Pace	11-14-17	7:00	FedEx			
	[illegible] / Pace	11-15-17	10:00	[illegible] / Pace	11-10-17	10:00	1.8
	FedEx						

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER: Andy Colson	
SIGNATURE of SAMPLER: [illegible]	DATE Signed: 11/10/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	Y	Y

Pace Analytical

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Sample Condition Ul

WO# : 2065329

PM: CJM Due Date: 12/01/17
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 11/16/17 tmB

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☐No	☑N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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November 28, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2065701

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on November 22, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2065701

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2065701

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2065701001	**TB-20171113**	Water	11/13/17 00:00	11/22/17 10:22
2065701002	**EB-20171113**	Water	11/13/17 08:00	11/22/17 10:22
2065701003	**FB-20171113**	Water	11/13/17 09:02	11/22/17 10:22
2065701004	**MW-1B-1BR-BP**	Water	11/13/17 10:20	11/22/17 10:22
2065701005	**MW-1B-4-BP**	Water	11/13/17 12:03	11/22/17 10:22
2065701006	**PCMW-2-BP**	Water	11/13/17 13:40	11/22/17 10:22
2065701007	**EB-20171114**	Water	11/14/17 08:38	11/22/17 10:22
2065701008	**FB-20171114**	Water	11/14/17 09:00	11/22/17 10:22
2065701009	**MW-2C-3-BP**	Water	11/14/17 10:21	11/22/17 10:22
2065701010	**FMW-3-90-BP**	Water	11/14/17 11:39	11/22/17 10:22
2065701011	**FMW-2-90-BP**	Water	11/14/17 13:17	11/22/17 10:22
2065701012	**EB-20171115**	Water	11/15/17 07:58	11/22/17 10:22
2065701013	**FB-20171115**	Water	11/15/17 08:51	11/22/17 10:22
2065701014	**FMW-5-90**	Water	11/15/17 10:27	11/22/17 10:22
2065701015	**MW-4B-1BR**	Water	11/15/17 12:19	11/22/17 10:22
2065701016	**EB-20171717**	Water	11/17/17 08:20	11/22/17 10:22
2065701017	**FB-20171717**	Water	11/17/17 09:45	11/22/17 10:22
2065701018	**MW-1C-1BR-A**	Water	11/17/17 11:43	11/22/17 10:22

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2065701

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2065701001	**TB-20171113**	EPA 5030B/8260	GEM	56	PASI-N
2065701002	**EB-20171113**	EPA 5030B/8260	GEM	56	PASI-N
2065701003	**FB-20171113**	EPA 5030B/8260	GEM	56	PASI-N
2065701004	**MW-1B-1BR-BP**	EPA 5030B/8260	GEM	56	PASI-N
2065701005	**MW-1B-4-BP**	EPA 5030B/8260	GEM	56	PASI-N
2065701006	**PCMW-2-BP**	EPA 5030B/8260	GEM	56	PASI-N
2065701007	**EB-20171114**	EPA 5030B/8260	GEM	56	PASI-N
2065701008	**FB-20171114**	EPA 5030B/8260	GEM	56	PASI-N
2065701009	**MW-2C-3-BP**	EPA 5030B/8260	GEM	56	PASI-N
2065701010	**FMW-3-90-BP**	EPA 5030B/8260	GEM	56	PASI-N
2065701011	**FMW-2-90-BP**	EPA 5030B/8260	GEM	56	PASI-N
2065701012	**EB-20171115**	EPA 5030B/8260	GEM	56	PASI-N
2065701013	**FB-20171115**	EPA 5030B/8260	GEM	56	PASI-N
2065701014	**FMW-5-90**	EPA 5030B/8260	GEM	56	PASI-N
2065701015	**MW-4B-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2065701016	**EB-20171717**	EPA 5030B/8260	GEM	56	PASI-N
2065701017	**FB-20171717**	EPA 5030B/8260	GEM	56	PASI-N
2065701018	**MW-1C-1BR-A**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2065701

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: November 28, 2017

General Information:
18 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 95220

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2065701004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 409607)
  - Tetrachloroethene
- MSD (Lab ID: 409608)
  - Haloether 427

R1: RPD value was outside control limits.

- MSD (Lab ID: 409608)
  - Haloether 229

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: TB-20171113 **Lab ID: 2065701001** Collected: 11/13/17 00:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 19:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 19:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 19:57	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 19:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 19:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 19:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 19:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 19:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 19:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 19:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 19:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 19:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 19:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 19:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 19:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 19:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 19:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 19:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 19:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 19:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 406	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 421	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 427	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 428	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 508	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 528	ND	ug/L	1.0	1		11/22/17 19:57		
Halomar	ND	ug/L	1.0	1		11/22/17 19:57		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 19:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 19:57		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 19:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 19:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 19:57	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 19:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 19:57	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 19:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 19:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: TB-20171113 **Lab ID: 2065701001** Collected: 11/13/17 00:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 19:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 19:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 19:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 19:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 19:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 19:57	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 19:57	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/22/17 19:57	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 19:57	1868-53-7	

Sample: EB-20171113 **Lab ID: 2065701002** Collected: 11/13/17 08:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.7**	ug/L	4.0	1		11/22/17 20:14	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 20:14	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 20:14	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 20:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:14	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 20:14	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 20:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 20:14	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 20:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:14	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:14	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:14	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 20:14	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:14	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 406	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 421	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 427	ND	ug/L	1.0	1		11/22/17 20:14		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171113 **Lab ID: 2065701002** Collected: 11/13/17 08:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 508	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 528	ND	ug/L	1.0	1		11/22/17 20:14		
Halomar	ND	ug/L	1.0	1		11/22/17 20:14		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 20:14	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 20:14		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 20:14	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 20:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 20:14	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 20:14	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:14	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 20:14		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 20:14	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:14	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:14	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 20:14	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		11/22/17 20:14	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 20:14	1868-53-7	

Sample: FB-20171113 **Lab ID: 2065701003** Collected: 11/13/17 09:02 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.2**	ug/L	4.0	1		11/22/17 20:32	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 20:32	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 20:32	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 20:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:32	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 20:32	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 20:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 20:32	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 20:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:32	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:32	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:32	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171113 **Lab ID: 2065701003** Collected: 11/13/17 09:02 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:32	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:32	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:32	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 20:32	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:32	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 406	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 421	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 427	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 428	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 508	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 528	ND	ug/L	1.0	1		11/22/17 20:32		
Halomar	ND	ug/L	1.0	1		11/22/17 20:32		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 20:32	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 20:32		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 20:32	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 20:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 20:32	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 20:32	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:32	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 20:32		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 20:32	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:32	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:32	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:32	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 20:32	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 20:32	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 20:32	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1B-1BR-BP **Lab ID: 2065701004** Collected: 11/13/17 10:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 18:10	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 18:10	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 18:10	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 18:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 18:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 18:10	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 18:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 18:10	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 18:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 18:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 18:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 18:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 18:10	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 18:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 18:10	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 18:10	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:10	75-35-4	
cis-1,2-Dichloroethene	**4.7**	ug/L	1.0	1		11/22/17 18:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:10	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 18:10	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 18:10	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 18:10		R1
Haloether 406	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 421	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 427	ND	ug/L	1.0	1		11/22/17 18:10		M1
Haloether 428	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 508	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 528	ND	ug/L	1.0	1		11/22/17 18:10		
Halomar	ND	ug/L	1.0	1		11/22/17 18:10		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 18:10	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 18:10		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 18:10	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 18:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 18:10	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 18:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:10	79-34-5	
Tetrachloroethene	**53.4**	ug/L	1.0	1		11/22/17 18:10	127-18-4	M1
Toluene	ND	ug/L	1.0	1		11/22/17 18:10	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 18:10		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	79-00-5	
Trichloroethene	**3.5**	ug/L	1.0	1		11/22/17 18:10	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1B-1BR-BP **Lab ID: 2065701004** Collected: 11/13/17 10:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	**1.5**	ug/L	1.0	1		11/22/17 18:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 18:10	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 18:10	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 18:10	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 18:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 18:10	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		11/22/17 18:10	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		11/22/17 18:10	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 18:10	1868-53-7	

Sample: MW-1B-4-BP **Lab ID: 2065701005** Collected: 11/13/17 12:03 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 20:50	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 20:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 20:50	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 20:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:50	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 20:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 20:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 20:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 20:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:50	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 20:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:50	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 406	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 421	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 427	ND	ug/L	1.0	1		11/22/17 20:50		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1B-4-BP **Lab ID: 2065701005** Collected: 11/13/17 12:03 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 508	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 528	ND	ug/L	1.0	1		11/22/17 20:50		
Halomar	ND	ug/L	1.0	1		11/22/17 20:50		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 20:50	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 20:50		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 20:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 20:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 20:50	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:50	79-34-5	
Tetrachloroethene	**1.6**	ug/L	1.0	1		11/22/17 20:50	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:50	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 20:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 20:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:50	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		11/22/17 20:50	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 20:50	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		11/22/17 20:50	1868-53-7	

Sample: PCMW-2-BP **Lab ID: 2065701006** Collected: 11/13/17 13:40 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 21:08	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 21:08	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 21:08	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 21:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 21:08	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 21:08	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 21:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 21:08	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 21:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 21:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 21:08	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 21:08	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 21:08	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: PCMW-2-BP **Lab ID: 2065701006** Collected: 11/13/17 13:40 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 21:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 21:08	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 21:08	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:08	75-35-4	
cis-1,2-Dichloroethene	**2.2**	ug/L	1.0	1		11/22/17 21:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 21:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:08	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 21:08	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 21:08	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 406	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 421	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 427	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 428	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 508	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 528	ND	ug/L	1.0	1		11/22/17 21:08		
Halomar	ND	ug/L	1.0	1		11/22/17 21:08		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 21:08	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 21:08		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 21:08	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 21:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 21:08	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 21:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 21:08	79-34-5	
Tetrachloroethene	**21.2**	ug/L	1.0	1		11/22/17 21:08	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 21:08	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 21:08		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	79-00-5	
Trichloroethene	**2.5**	ug/L	1.0	1		11/22/17 21:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 21:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 21:08	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 21:08	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 21:08	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 21:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 21:08	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 21:08	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/22/17 21:08	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		11/22/17 21:08	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171114 **Lab ID: 2065701007** Collected: 11/14/17 08:38 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.1**	ug/L	4.0	1		11/22/17 21:26	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 21:26	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 21:26	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 21:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 21:26	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 21:26	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 21:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 21:26	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 21:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 21:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 21:26	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 21:26	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 21:26	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 21:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 21:26	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 21:26	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 21:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:26	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 21:26	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 21:26	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 406	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 421	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 427	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 428	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 508	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 528	ND	ug/L	1.0	1		11/22/17 21:26		
Halomar	ND	ug/L	1.0	1		11/22/17 21:26		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 21:26	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 21:26		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 21:26	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 21:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 21:26	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 21:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 21:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 21:26	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 21:26	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 21:26		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171114 **Lab ID: 2065701007** Collected: 11/14/17 08:38 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 21:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 21:26	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 21:26	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 21:26	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 21:26	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 21:26	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 21:26	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		11/22/17 21:26	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 21:26	1868-53-7	

Sample: FB-20171114 **Lab ID: 2065701008** Collected: 11/14/17 09:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 21:44	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 21:44	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 21:44	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 21:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 21:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 21:44	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 21:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 21:44	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 21:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 21:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 21:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 21:44	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 21:44	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 21:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 21:44	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 21:44	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 21:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:44	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 21:44	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 21:44	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 406	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 421	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 427	ND	ug/L	1.0	1		11/22/17 21:44		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171114 **Lab ID: 2065701008** Collected: 11/14/17 09:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 508	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 528	ND	ug/L	1.0	1		11/22/17 21:44		
Halomar	ND	ug/L	1.0	1		11/22/17 21:44		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 21:44	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 21:44		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 21:44	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 21:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 21:44	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 21:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 21:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 21:44	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 21:44	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 21:44		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 21:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 21:44	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 21:44	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 21:44	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 21:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 21:44	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 21:44	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		11/22/17 21:44	460-00-4	
Dibromofluoromethane (S)	95	%.	72-126	1		11/22/17 21:44	1868-53-7	

Sample: MW-2C-3-BP **Lab ID: 2065701009** Collected: 11/14/17 10:21 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:01	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 22:01	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-2C-3-BP **Lab ID: 2065701009** Collected: 11/14/17 10:21 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:01	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		11/22/17 22:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:01	100-41-4	
Haloether 229	**34.5**	ug/L	1.0	1		11/22/17 22:01		
Haloether 406	**1.1**	ug/L	1.0	1		11/22/17 22:01		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:01		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:01		
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:01		
Haloether 508	**29.1**	ug/L	1.0	1		11/22/17 22:01		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:01		
Halomar	ND	ug/L	1.0	1		11/22/17 22:01		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:01	591-78-6	
Isoflurane	**147**	ug/L	1.0	1		11/22/17 22:01		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:01	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:01	79-34-5	
Tetrachloroethene	**2.9**	ug/L	1.0	1		11/22/17 22:01	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:01	108-88-3	
Total Haloether	**213**	ug/L	1.0	1		11/22/17 22:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 22:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 22:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:01	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 22:01	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 22:01	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		11/22/17 22:01	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-3-90-BP **Lab ID: 2065701010** Collected: 11/14/17 11:39 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:19	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:19	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:19	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:19	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:19	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 22:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:19	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:19	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:19	75-35-4	
cis-1,2-Dichloroethene	**1.5**	ug/L	1.0	1		11/22/17 22:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:19	10061-02-6	
Enflurane	**5.5**	ug/L	1.0	1		11/22/17 22:19	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:19	100-41-4	
Haloether 229	**3.7**	ug/L	1.0	1		11/22/17 22:19		
Haloether 406	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 508	**75.5**	ug/L	1.0	1		11/22/17 22:19		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:19		
Halomar	**2.3**	ug/L	1.0	1		11/22/17 22:19		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:19	591-78-6	
Isoflurane	**30.8**	ug/L	1.0	1		11/22/17 22:19		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:19	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:19	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:19	79-34-5	
Tetrachloroethene	**24.8**	ug/L	1.0	1		11/22/17 22:19	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:19	108-88-3	
Total Haloether	**118**	ug/L	1.0	1		11/22/17 22:19		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:19	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-3-90-BP **Lab ID: 2065701010** Collected: 11/14/17 11:39 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	**1.0**	ug/L	1.0	1		11/22/17 22:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:19	96-18-4	
1,1,2-Trichlorotrifluoroethane	**2.3**	ug/L	1.0	1		11/22/17 22:19	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:19	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:19	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 22:19	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		11/22/17 22:19	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 22:19	1868-53-7	

Sample: FMW-2-90-BP **Lab ID: 2065701011** Collected: 11/14/17 13:17 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:37	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:37	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:37	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:37	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:37	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:37	75-00-3	
Chloroform	**1.5**	ug/L	1.0	1		11/22/17 22:37	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:37	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:37	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:37	10061-02-6	
Enflurane	**13.7**	ug/L	1.0	1		11/22/17 22:37	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:37	100-41-4	
Haloether 229	**14.1**	ug/L	1.0	1		11/22/17 22:37		
Haloether 406	**1.9**	ug/L	1.0	1		11/22/17 22:37		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:37		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:37		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-2-90-BP **Lab ID: 2065701011** Collected: 11/14/17 13:17 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:37		
Haloether 508	**109**	ug/L	1.0	1		11/22/17 22:37		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:37		
Halomar	**4.1**	ug/L	1.0	1		11/22/17 22:37		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:37	591-78-6	
Isoflurane	**74.6**	ug/L	1.0	1		11/22/17 22:37		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:37	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:37	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:37	79-34-5	
Tetrachloroethene	**11.3**	ug/L	1.0	1		11/22/17 22:37	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:37	108-88-3	
Total Haloether	**217**	ug/L	1.0	1		11/22/17 22:37		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 22:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	**2.9**	ug/L	1.0	1		11/22/17 22:37	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:37	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:37	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 22:37	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 22:37	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 22:37	1868-53-7	

Sample: EB-20171115 **Lab ID: 2065701012** Collected: 11/15/17 07:58 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:55	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:55	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:55	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:55	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:55	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:55	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 22:55	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171115 **Lab ID: 2065701012** Collected: 11/15/17 07:58 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:55	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:55	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:55	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 22:55	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:55	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 406	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 508	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:55		
Halomar	ND	ug/L	1.0	1		11/22/17 22:55		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:55	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 22:55		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:55	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:55	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 22:55	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:55	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 22:55		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 22:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 22:55	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:55	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:55	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 22:55	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 22:55	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		11/22/17 22:55	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171115 **Lab ID: 2065701013** Collected: 11/15/17 08:51 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		11/22/17 23:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 23:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 23:12	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 23:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 23:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 23:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 23:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 23:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 23:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 23:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 23:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 23:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 23:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 23:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 23:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 23:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 23:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 23:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 23:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 406	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 421	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 427	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 428	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 508	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 528	ND	ug/L	1.0	1		11/22/17 23:12		
Halomar	ND	ug/L	1.0	1		11/22/17 23:12		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 23:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 23:12		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 23:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 23:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 23:12	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 23:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 23:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 23:12	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 23:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 23:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171115 **Lab ID: 2065701013** Collected: 11/15/17 08:51 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 23:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 23:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 23:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 23:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 23:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 23:12	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		11/22/17 23:12	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		11/22/17 23:12	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		11/22/17 23:12	1868-53-7	

Sample: FMW-5-90 **Lab ID: 2065701014** Collected: 11/15/17 10:27 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 23:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 23:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 23:30	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 23:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 23:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 23:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 23:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 23:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 23:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 23:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 23:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 23:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 23:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 23:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 23:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 23:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 23:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 23:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 23:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 406	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 421	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 427	ND	ug/L	1.0	1		11/22/17 23:30		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-5-90 **Lab ID: 2065701014** Collected: 11/15/17 10:27 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 508	**97.3**	ug/L	1.0	1		11/22/17 23:30		
Haloether 528	ND	ug/L	1.0	1		11/22/17 23:30		
Halomar	ND	ug/L	1.0	1		11/22/17 23:30		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 23:30	591-78-6	
Isoflurane	**8.5**	ug/L	1.0	1		11/22/17 23:30		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 23:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 23:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 23:30	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 23:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 23:30	79-34-5	
Tetrachloroethene	**5.1**	ug/L	1.0	1		11/22/17 23:30	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 23:30	108-88-3	
Total Haloether	**106**	ug/L	1.0	1		11/22/17 23:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 23:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 23:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 23:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 23:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 23:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 23:30	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 23:30	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		11/22/17 23:30	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		11/22/17 23:30	1868-53-7	

Sample: MW-4B-1BR **Lab ID: 2065701015** Collected: 11/15/17 12:19 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.1**	ug/L	4.0	1		11/22/17 23:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 23:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 23:48	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 23:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 23:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 23:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 23:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 23:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 23:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 23:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 23:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 23:48	75-00-3	
Chloroform	**1.1**	ug/L	1.0	1		11/22/17 23:48	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-4B-1BR **Lab ID: 2065701015** Collected: 11/15/17 12:19 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 23:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 23:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 23:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 23:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:48	10061-02-6	
Enflurane	**6.2**	ug/L	1.0	1		11/22/17 23:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 23:48	100-41-4	
Haloether 229	**17.2**	ug/L	1.0	1		11/22/17 23:48		
Haloether 406	**1.1**	ug/L	1.0	1		11/22/17 23:48		
Haloether 421	ND	ug/L	1.0	1		11/22/17 23:48		
Haloether 427	ND	ug/L	1.0	1		11/22/17 23:48		
Haloether 428	ND	ug/L	1.0	1		11/22/17 23:48		
Haloether 508	**16.7**	ug/L	1.0	1		11/22/17 23:48		
Haloether 528	ND	ug/L	1.0	1		11/22/17 23:48		
Halomar	**4.7**	ug/L	1.0	1		11/22/17 23:48		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 23:48	591-78-6	
Isoflurane	**163**	ug/L	1.0	1		11/22/17 23:48		
Methoxyflurane	**1.0**	ug/L	1.0	1		11/22/17 23:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 23:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 23:48	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 23:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 23:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 23:48	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 23:48	108-88-3	
Total Haloether	**210**	ug/L	1.0	1		11/22/17 23:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 23:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 23:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 23:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 23:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 23:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 23:48	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 23:48	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		11/22/17 23:48	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		11/22/17 23:48	1868-53-7	

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171717 **Lab ID: 2065701016** Collected: 11/17/17 08:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.7**	ug/L	4.0	1		11/23/17 01:17	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/23/17 01:17	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/23/17 01:17	107-13-1	
Benzene	ND	ug/L	1.0	1		11/23/17 01:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/23/17 01:17	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/23/17 01:17	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/23/17 01:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/23/17 01:17	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/23/17 01:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/23/17 01:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/23/17 01:17	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/23/17 01:17	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/23/17 01:17	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/23/17 01:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/23/17 01:17	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/23/17 01:17	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/23/17 01:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:17	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/23/17 01:17	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/23/17 01:17	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 406	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 421	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 427	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 428	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 508	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 528	ND	ug/L	1.0	1		11/23/17 01:17		
Halomar	ND	ug/L	1.0	1		11/23/17 01:17		
2-Hexanone	ND	ug/L	2.0	1		11/23/17 01:17	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/23/17 01:17		
Methoxyflurane	ND	ug/L	1.0	1		11/23/17 01:17	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/23/17 01:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/23/17 01:17	108-10-1	
Styrene	ND	ug/L	1.0	1		11/23/17 01:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/23/17 01:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/23/17 01:17	127-18-4	
Toluene	ND	ug/L	1.0	1		11/23/17 01:17	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/23/17 01:17		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171717 **Lab ID: 2065701016** Collected: 11/17/17 08:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/23/17 01:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/23/17 01:17	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/23/17 01:17	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/23/17 01:17	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/23/17 01:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/23/17 01:17	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/23/17 01:17	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		11/23/17 01:17	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/23/17 01:17	1868-53-7	

Sample: FB-20171717 **Lab ID: 2065701017** Collected: 11/17/17 09:45 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.6**	ug/L	4.0	1		11/23/17 01:35	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/23/17 01:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/23/17 01:35	107-13-1	
Benzene	ND	ug/L	1.0	1		11/23/17 01:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/23/17 01:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/23/17 01:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/23/17 01:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/23/17 01:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/23/17 01:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/23/17 01:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/23/17 01:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/23/17 01:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/23/17 01:35	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/23/17 01:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/23/17 01:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/23/17 01:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/23/17 01:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/23/17 01:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/23/17 01:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 406	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 421	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 427	ND	ug/L	1.0	1		11/23/17 01:35		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171717 **Lab ID: 2065701017** Collected: 11/17/17 09:45 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 508	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 528	ND	ug/L	1.0	1		11/23/17 01:35		
Halomar	ND	ug/L	1.0	1		11/23/17 01:35		
2-Hexanone	ND	ug/L	2.0	1		11/23/17 01:35	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/23/17 01:35		
Methoxyflurane	ND	ug/L	1.0	1		11/23/17 01:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/23/17 01:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/23/17 01:35	108-10-1	
Styrene	ND	ug/L	1.0	1		11/23/17 01:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/23/17 01:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/23/17 01:35	127-18-4	
Toluene	ND	ug/L	1.0	1		11/23/17 01:35	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/23/17 01:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/23/17 01:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/23/17 01:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/23/17 01:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/23/17 01:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/23/17 01:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/23/17 01:35	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/23/17 01:35	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		11/23/17 01:35	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		11/23/17 01:35	1868-53-7	

Sample: MW-1C-1BR-A **Lab ID: 2065701018** Collected: 11/17/17 11:43 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.8**	ug/L	4.0	1		11/23/17 01:53	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/23/17 01:53	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/23/17 01:53	107-13-1	
Benzene	**4.2**	ug/L	1.0	1		11/23/17 01:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/23/17 01:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/23/17 01:53	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/23/17 01:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/23/17 01:53	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/23/17 01:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/23/17 01:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/23/17 01:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/23/17 01:53	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/23/17 01:53	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1C-1BR-A **Lab ID: 2065701018** Collected: 11/17/17 11:43 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/23/17 01:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/23/17 01:53	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/23/17 01:53	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:53	75-35-4	
cis-1,2-Dichloroethene	**1.8**	ug/L	1.0	1		11/23/17 01:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/23/17 01:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:53	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/23/17 01:53	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/23/17 01:53	100-41-4	
Haloether 229	**1.5**	ug/L	1.0	1		11/23/17 01:53		
Haloether 406	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 421	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 427	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 428	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 508	**4.9**	ug/L	1.0	1		11/23/17 01:53		
Haloether 528	ND	ug/L	1.0	1		11/23/17 01:53		
Halomar	ND	ug/L	1.0	1		11/23/17 01:53		
2-Hexanone	ND	ug/L	2.0	1		11/23/17 01:53	591-78-6	
Isoflurane	**15.4**	ug/L	1.0	1		11/23/17 01:53		
Methoxyflurane	ND	ug/L	1.0	1		11/23/17 01:53	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/23/17 01:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/23/17 01:53	108-10-1	
Styrene	ND	ug/L	1.0	1		11/23/17 01:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/23/17 01:53	79-34-5	
Tetrachloroethene	**10.7**	ug/L	1.0	1		11/23/17 01:53	127-18-4	
Toluene	ND	ug/L	1.0	1		11/23/17 01:53	108-88-3	
Total Haloether	**21.8**	ug/L	1.0	1		11/23/17 01:53		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/23/17 01:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/23/17 01:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/23/17 01:53	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/23/17 01:53	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/23/17 01:53	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/23/17 01:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/23/17 01:53	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/23/17 01:53	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/23/17 01:53	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		11/23/17 01:53	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065701

QC Batch: 95220 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2065701001, 2065701002, 2065701003, 2065701004, 2065701005, 2065701006, 2065701007, 2065701008, 2065701009, 2065701010, 2065701011, 2065701012, 2065701013, 2065701014, 2065701015, 2065701016, 2065701017, 2065701018

METHOD BLANK: 409605 | Matrix: Water
Associated Lab Samples: 2065701001, 2065701002, 2065701003, 2065701004, 2065701005, 2065701006, 2065701007, 2065701008, 2065701009, 2065701010, 2065701011, 2065701012, 2065701013, 2065701014, 2065701015, 2065701016, 2065701017, 2065701018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	11/22/17 16:42	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/22/17 16:42	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/22/17 16:42	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	11/22/17 16:42	
1,1-Dichloroethane	ug/L	ND	1.0	11/22/17 16:42	
1,1-Dichloroethene	ug/L	ND	1.0	11/22/17 16:42	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/22/17 16:42	
1,2-Dichloroethane	ug/L	ND	1.0	11/22/17 16:42	
1,2-Dichloropropane	ug/L	ND	1.0	11/22/17 16:42	
2-Butanone (MEK)	ug/L	ND	2.0	11/22/17 16:42	
2-Hexanone	ug/L	ND	2.0	11/22/17 16:42	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	11/22/17 16:42	
Acetone	ug/L	ND	4.0	11/22/17 16:42	
Acrolein	ug/L	ND	8.0	11/22/17 16:42	
Acrylonitrile	ug/L	ND	4.0	11/22/17 16:42	
Benzene	ug/L	ND	1.0	11/22/17 16:42	
Bromodichloromethane	ug/L	ND	1.0	11/22/17 16:42	
Bromoform	ug/L	ND	1.0	11/22/17 16:42	
Bromomethane	ug/L	ND	1.0	11/22/17 16:42	
Carbon disulfide	ug/L	ND	1.0	11/22/17 16:42	
Carbon tetrachloride	ug/L	ND	1.0	11/22/17 16:42	
Chlorobenzene	ug/L	ND	1.0	11/22/17 16:42	
Chloroethane	ug/L	ND	1.0	11/22/17 16:42	
Chloroform	ug/L	ND	1.0	11/22/17 16:42	
Chloromethane	ug/L	ND	1.0	11/22/17 16:42	
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/22/17 16:42	
cis-1,3-Dichloropropene	ug/L	ND	1.0	11/22/17 16:42	
Dibromochloromethane	ug/L	ND	1.0	11/22/17 16:42	
Dibromomethane	ug/L	ND	1.0	11/22/17 16:42	
Enflurane	ug/L	ND	1.0	11/22/17 16:42	
Ethylbenzene	ug/L	ND	1.0	11/22/17 16:42	
Haloether 229	ug/L	ND	1.0	11/22/17 16:42	
Haloether 406	ug/L	ND	1.0	11/22/17 16:42	
Haloether 421	ug/L	ND	1.0	11/22/17 16:42	
Haloether 427	ug/L	ND	1.0	11/22/17 16:42	
Haloether 428	ug/L	ND	1.0	11/22/17 16:42	
Haloether 508	ug/L	ND	1.0	11/22/17 16:42	
Haloether 528	ug/L	ND	1.0	11/22/17 16:42	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065701

METHOD BLANK: 409605 Matrix: Water

Associated Lab Samples: 2065701001, 2065701002, 2065701003, 2065701004, 2065701005, 2065701006, 2065701007, 2065701008, 2065701009, 2065701010, 2065701011, 2065701012, 2065701013, 2065701014, 2065701015, 2065701016, 2065701017, 2065701018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Halomar	ug/L	ND	1.0	11/22/17 16:42	
Isoflurane	ug/L	ND	1.0	11/22/17 16:42	
m&p-Xylene	ug/L	ND	2.0	11/22/17 16:42	
Methoxyflurane	ug/L	ND	1.0	11/22/17 16:42	
Methylene Chloride	ug/L	ND	5.0	11/22/17 16:42	
o-Xylene	ug/L	ND	1.0	11/22/17 16:42	
Styrene	ug/L	ND	1.0	11/22/17 16:42	
Tetrachloroethene	ug/L	ND	1.0	11/22/17 16:42	
Toluene	ug/L	ND	1.0	11/22/17 16:42	
Total Haloether	ug/L	ND	1.0	11/22/17 16:42	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/22/17 16:42	
trans-1,3-Dichloropropene	ug/L	ND	1.0	11/22/17 16:42	
Trichloroethene	ug/L	ND	1.0	11/22/17 16:42	
Trichlorofluoromethane	ug/L	ND	1.0	11/22/17 16:42	
Vinyl chloride	ug/L	ND	1.0	11/22/17 16:42	
4-Bromofluorobenzene (S)	%.	106	68-124	11/22/17 16:42	
Dibromofluoromethane (S)	%.	97	72-126	11/22/17 16:42	
Toluene-d8 (S)	%.	97	79-119	11/22/17 16:42	

METHOD BLANK: 409693 Matrix: Water

Associated Lab Samples: 2065701001, 2065701002, 2065701003, 2065701004, 2065701005, 2065701006, 2065701007, 2065701008, 2065701009, 2065701010, 2065701011, 2065701012, 2065701013, 2065701014, 2065701015, 2065701016, 2065701017, 2065701018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	11/23/17 00:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/23/17 00:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/23/17 00:24	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	11/23/17 00:24	
1,1-Dichloroethane	ug/L	ND	1.0	11/23/17 00:24	
1,1-Dichloroethene	ug/L	ND	1.0	11/23/17 00:24	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/23/17 00:24	
1,2-Dichloroethane	ug/L	ND	1.0	11/23/17 00:24	
1,2-Dichloropropane	ug/L	ND	1.0	11/23/17 00:24	
2-Butanone (MEK)	ug/L	ND	2.0	11/23/17 00:24	
2-Hexanone	ug/L	ND	2.0	11/23/17 00:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	11/23/17 00:24	
Acetone	ug/L	ND	4.0	11/23/17 00:24	
Acrolein	ug/L	ND	8.0	11/23/17 00:24	
Acrylonitrile	ug/L	ND	4.0	11/23/17 00:24	
Benzene	ug/L	ND	1.0	11/23/17 00:24	
Bromodichloromethane	ug/L	ND	1.0	11/23/17 00:24	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065701

METHOD BLANK: 409693 Matrix: Water

Associated Lab Samples: 2065701001, 2065701002, 2065701003, 2065701004, 2065701005, 2065701006, 2065701007, 2065701008, 2065701009, 2065701010, 2065701011, 2065701012, 2065701013, 2065701014, 2065701015, 2065701016, 2065701017, 2065701018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	ND	1.0	11/23/17 00:24	
Bromomethane	ug/L	ND	1.0	11/23/17 00:24	
Carbon disulfide	ug/L	ND	1.0	11/23/17 00:24	
Carbon tetrachloride	ug/L	ND	1.0	11/23/17 00:24	
Chlorobenzene	ug/L	ND	1.0	11/23/17 00:24	
Chloroethane	ug/L	ND	1.0	11/23/17 00:24	
Chloroform	ug/L	ND	1.0	11/23/17 00:24	
Chloromethane	ug/L	ND	1.0	11/23/17 00:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/23/17 00:24	
cis-1,3-Dichloropropene	ug/L	ND	1.0	11/23/17 00:24	
Dibromochloromethane	ug/L	ND	1.0	11/23/17 00:24	
Dibromomethane	ug/L	ND	1.0	11/23/17 00:24	
Enflurane	ug/L	ND	1.0	11/23/17 00:24	
Ethylbenzene	ug/L	ND	1.0	11/23/17 00:24	
Haloether 229	ug/L	ND	1.0	11/23/17 00:24	
Haloether 406	ug/L	ND	1.0	11/23/17 00:24	
Haloether 421	ug/L	ND	1.0	11/23/17 00:24	
Haloether 427	ug/L	ND	1.0	11/23/17 00:24	
Haloether 428	ug/L	ND	1.0	11/23/17 00:24	
Haloether 508	ug/L	ND	1.0	11/23/17 00:24	
Haloether 528	ug/L	ND	1.0	11/23/17 00:24	
Halomar	ug/L	ND	1.0	11/23/17 00:24	
Isoflurane	ug/L	ND	1.0	11/23/17 00:24	
m&p-Xylene	ug/L	ND	2.0	11/23/17 00:24	
Methoxyflurane	ug/L	ND	1.0	11/23/17 00:24	
Methylene Chloride	ug/L	ND	5.0	11/23/17 00:24	
o-Xylene	ug/L	ND	1.0	11/23/17 00:24	
Styrene	ug/L	ND	1.0	11/23/17 00:24	
Tetrachloroethene	ug/L	ND	1.0	11/23/17 00:24	
Toluene	ug/L	ND	1.0	11/23/17 00:24	
Total Haloether	ug/L	ND	1.0	11/23/17 00:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/23/17 00:24	
trans-1,3-Dichloropropene	ug/L	ND	1.0	11/23/17 00:24	
Trichloroethene	ug/L	ND	1.0	11/23/17 00:24	
Trichlorofluoromethane	ug/L	ND	1.0	11/23/17 00:24	
Vinyl chloride	ug/L	ND	1.0	11/23/17 00:24	
4-Bromofluorobenzene (S)	%.	104	68-124	11/23/17 00:24	
Dibromofluoromethane (S)	%.	99	72-126	11/23/17 00:24	
Toluene-d8 (S)	%.	96	79-119	11/23/17 00:24	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065701

LABORATORY CONTROL SAMPLE: 409606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.4	99	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	42.7	85	15-179	
1,1,2-Trichloroethane	ug/L	50	49.8	100	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	50.8	102	38-121	
1,1-Dichloroethane	ug/L	50	53.0	106	63-129	
1,1-Dichloroethene	ug/L	50	47.9	96	51-139	
1,2,3-Trichloropropane	ug/L	50	49.4	99	13-187	
1,2-Dichloroethane	ug/L	50	50.0	100	57-148	
1,2-Dichloropropane	ug/L	50	50.0	100	66-128	
2-Butanone (MEK)	ug/L	50	53.1	106	32-183	
2-Hexanone	ug/L	50	50.9	102	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	54.2	108	26-171	
Acetone	ug/L	50	59.2	118	22-165	
Acrolein	ug/L	50	48.2	96	10-131	
Acrylonitrile	ug/L	50	53.4	107	18-149	
Benzene	ug/L	50	44.7	89	62-131	
Bromodichloromethane	ug/L	50	47.3	95	69-132	
Bromoform	ug/L	50	51.5	103	35-166	
Bromomethane	ug/L	50	37.3	75	34-158	
Carbon disulfide	ug/L	50	44.7	89	31-128	
Carbon tetrachloride	ug/L	50	53.5	107	54-144	
Chlorobenzene	ug/L	50	52.7	105	70-127	
Chloroethane	ug/L	50	39.1	78	17-195	
Chloroform	ug/L	50	47.3	95	73-134	
Chloromethane	ug/L	50	51.0	102	17-153	
cis-1,2-Dichloroethene	ug/L	50	48.1	96	68-129	
cis-1,3-Dichloropropene	ug/L	50	46.0	92	72-138	
Dibromochloromethane	ug/L	50	49.1	98	49-146	
Dibromomethane	ug/L	50	47.6	95	56-145	
Enflurane	ug/L	50	51.4	103	56-135	
Ethylbenzene	ug/L	50	49.5	99	66-126	
Haloether 229	ug/L	50	38.7	77	62-123	
Haloether 406	ug/L	50	48.8	98	62-134	
Haloether 421	ug/L	50	47.6	95	70-128	
Haloether 427	ug/L	50	53.7	107	69-153	
Haloether 428	ug/L	50	51.1	102	70-134	
Haloether 508	ug/L	50	48.5	97	52-139	
Haloether 528	ug/L	50	54.9	110	48-157	
Halomar	ug/L	50	47.5	95	62-128	
Isoflurane	ug/L	50	50.5	101	61-132	
m&p-Xylene	ug/L	100	97.9	98	65-129	
Methoxyflurane	ug/L	50	47.2	94	72-124	
Methylene Chloride	ug/L	50	47.5	95	46-168	
o-Xylene	ug/L	50	48.6	97	65-124	
Styrene	ug/L	50	51.4	103	72-133	
Tetrachloroethene	ug/L	50	59.4	119	46-157	
Toluene	ug/L	50	46.6	93	69-126	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065701

LABORATORY CONTROL SAMPLE: 409606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Haloether	ug/L		540			
trans-1,2-Dichloroethene	ug/L	50	48.9	98	60-129	
trans-1,3-Dichloropropene	ug/L	50	47.0	94	59-149	
Trichloroethene	ug/L	50	53.3	107	67-132	
Trichlorofluoromethane	ug/L	50	46.8	94	39-171	
Vinyl chloride	ug/L	50	40.3	81	27-149	
4-Bromofluorobenzene (S)	%.			104	68-124	
Dibromofluoromethane (S)	%.			99	72-126	
Toluene-d8 (S)	%.			95	79-119	

LABORATORY CONTROL SAMPLE: 409694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.2	102	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	44.3	89	15-179	
1,1,2-Trichloroethane	ug/L	50	51.3	103	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	52.5	105	38-121	
1,1-Dichloroethane	ug/L	50	54.5	109	63-129	
1,1-Dichloroethene	ug/L	50	48.6	97	51-139	
1,2,3-Trichloropropane	ug/L	50	48.6	97	13-187	
1,2-Dichloroethane	ug/L	50	50.8	102	57-148	
1,2-Dichloropropane	ug/L	50	52.5	105	66-128	
2-Butanone (MEK)	ug/L	50	55.5	111	32-183	
2-Hexanone	ug/L	50	55.3	111	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	60.1	120	26-171	
Acetone	ug/L	50	62.9	126	22-165	
Acrolein	ug/L	50	49.8	100	10-131	
Acrylonitrile	ug/L	50	54.9	110	18-149	
Benzene	ug/L	50	46.9	94	62-131	
Bromodichloromethane	ug/L	50	47.8	96	69-132	
Bromoform	ug/L	50	57.4	115	35-166	
Bromomethane	ug/L	50	36.7	73	34-158	
Carbon disulfide	ug/L	50	46.9	94	31-128	
Carbon tetrachloride	ug/L	50	55.1	110	54-144	
Chlorobenzene	ug/L	50	56.9	114	70-127	
Chloroethane	ug/L	50	39.4	79	17-195	
Chloroform	ug/L	50	48.9	98	73-134	
Chloromethane	ug/L	50	54.3	109	17-153	
cis-1,2-Dichloroethene	ug/L	50	50.3	101	68-129	
cis-1,3-Dichloropropene	ug/L	50	46.9	94	72-138	
Dibromochloromethane	ug/L	50	55.3	111	49-146	
Dibromomethane	ug/L	50	49.1	98	56-145	
Enflurane	ug/L	50	53.5	107	56-135	
Ethylbenzene	ug/L	50	53.7	107	66-126	
Haloether 229	ug/L	50	38.7	77	62-123	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065701

LABORATORY CONTROL SAMPLE: 409694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Haloether 406	ug/L	50	48.0	96	62-134	
Haloether 421	ug/L	50	48.9	98	70-128	
Haloether 427	ug/L	50	53.9	108	69-153	
Haloether 428	ug/L	50	51.7	103	70-134	
Haloether 508	ug/L	50	46.3	93	52-139	
Haloether 528	ug/L	50	54.1	108	48-157	
Halomar	ug/L	50	48.5	97	62-128	
Isoflurane	ug/L	50	51.6	103	61-132	
m&p-Xylene	ug/L	100	106	106	65-129	
Methoxyflurane	ug/L	50	47.3	95	72-124	
Methylene Chloride	ug/L	50	51.1	102	46-168	
o-Xylene	ug/L	50	55.3	111	65-124	
Styrene	ug/L	50	55.3	111	72-133	
Tetrachloroethene	ug/L	50	69.8	140	46-157	
Toluene	ug/L	50	47.8	96	69-126	
Total Haloether	ug/L		543			
trans-1,2-Dichloroethene	ug/L	50	50.9	102	60-129	
trans-1,3-Dichloropropene	ug/L	50	46.9	94	59-149	
Trichloroethene	ug/L	50	54.5	109	67-132	
Trichlorofluoromethane	ug/L	50	43.9	88	39-171	
Vinyl chloride	ug/L	50	40.7	81	27-149	
4-Bromofluorobenzene (S)	%.			106	68-124	
Dibromofluoromethane (S)	%.			99	72-126	
Toluene-d8 (S)	%.			95	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 409607 409608

Parameter	Units	2065701004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	57.8	50.6	116	101	54-137	13	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	48.4	44.3	97	89	15-187	9	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	54.3	51.7	109	103	59-148	5	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	57.9	58.5	116	117	40-117	1	20	
1,1-Dichloroethane	ug/L	ND	50	50	59.0	54.1	118	108	59-133	9	20	
1,1-Dichloroethene	ug/L	ND	50	50	55.1	57.4	110	115	44-146	4	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	54.0	50.1	108	100	14-199	8	20	
1,2-Dichloroethane	ug/L	ND	50	50	55.9	50.7	112	101	56-154	10	20	
1,2-Dichloropropane	ug/L	ND	50	50	56.5	51.9	113	104	62-135	8	20	
2-Butanone (MEK)	ug/L	ND	50	50	55.8	51.5	112	103	20-205	8	20	
2-Hexanone	ug/L	ND	50	50	58.0	49.9	116	100	25-189	15	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	63.0	55.6	126	111	23-184	12	20	
Acetone	ug/L	ND	50	50	58.8	57.2	112	109	11-217	3	20	
Acrolein	ug/L	ND	50	50	54.0	49.2	108	98	10-142	9	20	
Acrylonitrile	ug/L	ND	50	50	58.5	51.1	117	102	20-164	14	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2065701

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 409607 409608

Parameter	Units	2065701004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	52.3	48.0	105	96	52-141	9	20	
Bromodichloromethane	ug/L	ND	50	50	52.3	50.2	105	100	70-134	4	20	
Bromoform	ug/L	ND	50	50	59.6	52.8	119	106	37-171	12	20	
Bromomethane	ug/L	ND	50	50	43.6	38.3	87	77	34-155	13	20	
Carbon disulfide	ug/L	ND	50	50	55.5	53.3	111	106	28-130	4	20	
Carbon tetrachloride	ug/L	ND	50	50	63.9	58.5	128	117	48-146	9	20	
Chlorobenzene	ug/L	ND	50	50	61.8	55.0	124	110	67-129	12	20	
Chloroethane	ug/L	ND	50	50	45.9	41.1	92	82	12-192	11	20	
Chloroform	ug/L	ND	50	50	54.1	48.0	107	95	66-143	12	20	
Chloromethane	ug/L	ND	50	50	59.9	52.3	120	105	14-155	13	20	
cis-1,2-Dichloroethene	ug/L	4.7	50	50	59.7	53.8	110	98	56-141	11	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	51.8	48.2	104	96	70-139	7	20	
Dibromochloromethane	ug/L	ND	50	50	57.3	51.4	115	103	50-150	11	20	
Dibromomethane	ug/L	ND	50	50	54.1	49.0	108	98	58-153	10	20	
Enflurane	ug/L	ND	50	50	60.3	53.8	121	108	63-126	11	20	
Ethylbenzene	ug/L	ND	50	50	58.0	52.7	116	105	57-135	9	20	
Haloether 229	ug/L	ND	50	50	52.4	41.4	105	83	56-127	23	20	R1
Haloether 406	ug/L	ND	50	50	57.5	50.5	115	101	68-128	13	20	
Haloether 421	ug/L	ND	50	50	55.5	51.4	111	103	74-120	8	20	
Haloether 427	ug/L	ND	50	50	62.5	60.3	125	121	78-120	3	20	M1
Haloether 428	ug/L	ND	50	50	59.9	57.5	120	115	74-125	4	20	
Haloether 508	ug/L	ND	50	50	55.7	49.7	111	99	28-156	12	20	
Haloether 528	ug/L	ND	50	50	60.2	55.1	120	110	45-142	9	20	
Halomar	ug/L	ND	50	50	54.3	48.6	109	97	67-123	11	20	
Isoflurane	ug/L	ND	50	50	59.5	52.8	119	106	45-140	12	20	
m&p-Xylene	ug/L	ND	100	100	118	105	118	105	56-136	11	20	
Methoxyflurane	ug/L	ND	50	50	52.7	48.3	105	97	75-119	9	20	
Methylene Chloride	ug/L	ND	50	50	52.7	48.4	105	97	45-166	9	20	
o-Xylene	ug/L	ND	50	50	60.8	53.1	122	106	57-133	13	20	
Styrene	ug/L	ND	50	50	59.0	52.1	118	104	58-144	12	20	
Tetrachloroethene	ug/L	53.4	50	50	133	119	159	131	48-143	11	20	M1
Toluene	ug/L	ND	50	50	53.7	49.7	107	99	59-136	8	20	
Total Haloether	ug/L	ND			631	569				10		
trans-1,2-Dichloroethene	ug/L	ND	50	50	57.5	51.5	115	103	57-132	11	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	52.9	49.1	106	98	59-154	7	20	
Trichloroethene	ug/L	3.5	50	50	67.2	59.3	127	112	58-140	12	20	
Trichlorofluoromethane	ug/L	1.5	50	50	57.1	49.0	111	95	24-175	15	20	
Vinyl chloride	ug/L	ND	50	50	47.2	40.2	94	80	21-150	16	20	
4-Bromofluorobenzene (S)	%.						105	106	68-124			
Dibromofluoromethane (S)	%.						97	98	72-126			
Toluene-d8 (S)	%.						94	97	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2065701

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2065701

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2065701001	**TB-20171113**	EPA 5030B/8260	95220		
2065701002	**EB-20171113**	EPA 5030B/8260	95220		
2065701003	**FB-20171113**	EPA 5030B/8260	95220		
2065701004	**MW-1B-1BR-BP**	EPA 5030B/8260	95220		
2065701005	**MW-1B-4-BP**	EPA 5030B/8260	95220		
2065701006	**PCMW-2-BP**	EPA 5030B/8260	95220		
2065701007	**EB-20171114**	EPA 5030B/8260	95220		
2065701008	**FB-20171114**	EPA 5030B/8260	95220		
2065701009	**MW-2C-3-BP**	EPA 5030B/8260	95220		
2065701010	**FMW-3-90-BP**	EPA 5030B/8260	95220		
2065701011	**FMW-2-90-BP**	EPA 5030B/8260	95220		
2065701012	**EB-20171115**	EPA 5030B/8260	95220		
2065701013	**FB-20171115**	EPA 5030B/8260	95220		
2065701014	**FMW-5-90**	EPA 5030B/8260	95220		
2065701015	**MW-4B-1BR**	EPA 5030B/8260	95220		
2065701016	**EB-20171717**	EPA 5030B/8260	95220		
2065701017	**FB-20171717**	EPA 5030B/8260	95220		
2065701018	**MW-1C-1BR-A**	EPA 5030B/8260	95220		

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Pace Analytical

CHAIN-OF-CUSTODY / Ana

The Chain-of-Custody is a LEGAL DOCUM

WO# : 2065701

2065701

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171113	WT	G		~~A~~	11/13/17	LAB		2				2							X			
2	EB-20171113	WT	G			11/13/17	0800		3				3						X				
3	FB-20171113	WT	G			11/13/17	0902		3				3						X				
4	MW-1B-1BR-BP	WT	G			11/13/17	1020		3				3						X				
5	MW-1B-4-BP	WT	G			11/13/17	1203		3				3						X				
6	PCMW-2-BP	WT	G			11/13/17	1340		3				3						X				
7	EB-20171114	WT	G			11/14/17	0836		3				3						X				
8	FB-20171114	WT	G			11/14/17	0900		3				3						X				
9	MW-2C-3-BP	WT	G			11/14/17	1021		3				3						X				
10	FMW-3-90-BP	WT	G			11/14/17	1139		3				3						X				
11	FMW-2-90-BP	WT	G			11/14/17	1317		3				3						X				
12	EB-20171115	WT	G			11/15/17	0758		3				3						X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	11/17/17	1509	[signature] PACE	11/17/17	15:09	20	Y	N	Y
				Fed Ex						
	Fed Ex	11/21/17	0910	[signature] Pace	11/21/17	0910	0.2	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colom

SIGNATURE of SAMPLER: [signature]

DATE Signed: 11/17/17

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A — Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B — Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency	
State / Location	
	PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	FB-20171115	WT	G			11/15/17	0851		3				3						X				
2	FMW-5-90	WT	G			11/15/17	1027		3				3						X				
3	MW-4B-IBR	WT	G			11/15/17	1219		3				3						X				
4	FB-20171117	WT	G			11/17/17	0820		3				3						X				
5	FB-20171117	WT	G			11/17/17	0945		3				3						X				
6	MW-1C-IBRA	WT	G			11/17/17	1143		3				3						X				
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andi Colon / Arcadis	11/17/17	1509	[signature] PSLC	11/17/17	1509	4°	Y	N	Y
				Fed Ex						
	Fed Ex	11/21/17	0910	[signature] Pace	11/21/17	0910	0.2	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andi Colon

SIGNATURE of SAMPLER: [signature] DATE Signed: 11/17/17

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upo

F

WO#: 2065701

PM: CJM Due Date: 12/08/17
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 11-22-17

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☑Yes	☐No	☐N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO_3 _____ H_2SO_4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical Services, LLC
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(504)469-0333

December 06, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2066110

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 01, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2066110

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2066110

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2066110001	**TB-20171127**	Water	11/27/17 00:00	12/01/17 09:15
2066110002	**EB-20171127**	Water	11/27/17 09:35	12/01/17 09:15
2066110003	**FB-20171127**	Water	11/27/17 09:57	12/01/17 09:15
2066110004	**FMW-2-90**	Water	11/27/17 11:22	12/01/17 09:15
2066110005	**MW-2C-3**	Water	11/27/17 12:15	12/01/17 09:15
2066110006	**EB-20171128**	Water	11/28/17 07:50	12/01/17 09:15
2066110007	**FB-20171128**	Water	11/28/17 09:20	12/01/17 09:15
2066110008	**PCMW-2**	Water	11/28/17 10:07	12/01/17 09:15
2066110009	**GWDUP001**	Water	11/28/17 00:00	12/01/17 09:15
2066110010	**MW-1B-1BR**	Water	11/28/17 11:02	12/01/17 09:15
2066110011	**MW-1B-4**	Water	11/28/17 12:06	12/01/17 09:15
2066110012	**EB-20171129**	Water	11/29/17 08:31	12/01/17 09:15
2066110013	**FB-20171129**	Water	11/29/17 10:23	12/01/17 09:15
2066110014	**ES-21**	Water	11/29/17 12:44	12/01/17 09:15

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2066110

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2066110001	**TB-20171127**	EPA 5030B/8260	GEM	56	PASI-N
2066110002	**EB-20171127**	EPA 5030B/8260	GEM	56	PASI-N
2066110003	**FB-20171127**	EPA 5030B/8260	GEM	56	PASI-N
2066110004	**FMW-2-90**	EPA 5030B/8260	GEM	56	PASI-N
2066110005	**MW-2C-3**	EPA 5030B/8260	GEM	56	PASI-N
2066110006	**EB-20171128**	EPA 5030B/8260	GEM	56	PASI-N
2066110007	**FB-20171128**	EPA 5030B/8260	GEM	56	PASI-N
2066110008	**PCMW-2**	EPA 5030B/8260	GEM	56	PASI-N
2066110009	**GWDUP001**	EPA 5030B/8260	GEM	56	PASI-N
2066110010	**MW-1B-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2066110011	**MW-1B-4**	EPA 5030B/8260	GEM	56	PASI-N
2066110012	**EB-20171129**	EPA 5030B/8260	GEM	56	PASI-N
2066110013	**FB-20171129**	EPA 5030B/8260	GEM	56	PASI-N
2066110014	**ES-21**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2066110

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 06, 2017

General Information:
14 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 95856

C9: Common Laboratory Contaminant.

- BLANK (Lab ID: 412213)
  - Methylene Chloride
- BLANK (Lab ID: 412510)
  - Methylene Chloride
- EB-20171127 (Lab ID: 2066110002)
  - Methylene Chloride
- EB-20171128 (Lab ID: 2066110006)
  - Methylene Chloride
- FB-20171128 (Lab ID: 2066110007)
  - Methylene Chloride

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2066110

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 06, 2017

Analyte Comments:

QC Batch: 95856

C9: Common Laboratory Contaminant.

- TB-20171127 (Lab ID: 2066110001)
  - Methylene Chloride

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: TB-20171127 **Lab ID: 2066110001** Collected: 11/27/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 17:53	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 17:53	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 17:53	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 17:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 17:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 17:53	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 17:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 17:53	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 17:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 17:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 17:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 17:53	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 17:53	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 17:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 17:53	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 17:53	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 17:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 17:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 17:53	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 17:53	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 17:53	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 406	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 421	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 427	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 428	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 508	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 528	ND	ug/L	1.0	1		12/04/17 17:53		
Halomar	ND	ug/L	1.0	1		12/04/17 17:53		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 17:53	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 17:53		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 17:53	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 17:53	75-09-2	B,C9
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 17:53	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 17:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 17:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 17:53	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 17:53	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 17:53		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: TB-20171127 **Lab ID: 2066110001** Collected: 11/27/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 17:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 17:53	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 17:53	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 17:53	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 17:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 17:53	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 17:53	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/04/17 17:53	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/04/17 17:53	1868-53-7	

Sample: EB-20171127 **Lab ID: 2066110002** Collected: 11/27/17 09:35 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 18:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 18:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 18:29	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 18:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 18:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 18:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 18:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 18:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 18:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 18:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 18:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 18:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 18:29	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 18:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 18:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 18:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 18:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:29	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 18:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 18:29	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 406	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 421	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 427	ND	ug/L	1.0	1		12/04/17 18:29		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: EB-20171127 **Lab ID: 2066110002** Collected: 11/27/17 09:35 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 508	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 528	ND	ug/L	1.0	1		12/04/17 18:29		
Halomar	ND	ug/L	1.0	1		12/04/17 18:29		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 18:29	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 18:29		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 18:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 18:29	75-09-2	B,C9
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 18:29	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 18:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 18:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 18:29	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 18:29	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 18:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 18:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 18:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 18:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 18:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 18:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 18:29	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 18:29	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 18:29	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 18:29	1868-53-7	

Sample: FB-20171127 **Lab ID: 2066110003** Collected: 11/27/17 09:57 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 18:46	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 18:46	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 18:46	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 18:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 18:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 18:46	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 18:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 18:46	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 18:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 18:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 18:46	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 18:46	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 18:46	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171127 **Lab ID: 2066110003** Collected: 11/27/17 09:57 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 18:46	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 18:46	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 18:46	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 18:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:46	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 18:46	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 18:46	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 406	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 421	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 427	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 428	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 508	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 528	ND	ug/L	1.0	1		12/04/17 18:46		
Halomar	ND	ug/L	1.0	1		12/04/17 18:46		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 18:46	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 18:46		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 18:46	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 18:46	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 18:46	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 18:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 18:46	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 18:46	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 18:46	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 18:46		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 18:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 18:46	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 18:46	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 18:46	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 18:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 18:46	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 18:46	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		12/04/17 18:46	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/04/17 18:46	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FMW-2-90 **Lab ID: 2066110004** Collected: 11/27/17 11:22 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:04	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:04	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:04	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:04	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:04	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:04	75-00-3	
Chloroform	**1.4**	ug/L	1.0	1		12/04/17 19:04	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:04	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:04	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:04	10061-02-6	
Enflurane	**12.3**	ug/L	1.0	1		12/04/17 19:04	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:04	100-41-4	
Haloether 229	**14.5**	ug/L	1.0	1		12/04/17 19:04		
Haloether 406	**1.9**	ug/L	1.0	1		12/04/17 19:04		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:04		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:04		
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:04		
Haloether 508	**98.1**	ug/L	1.0	1		12/04/17 19:04		
Haloether 528	**1.0**	ug/L	1.0	1		12/04/17 19:04		
Halomar	**3.7**	ug/L	1.0	1		12/04/17 19:04		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:04	591-78-6	
Isoflurane	**70.4**	ug/L	1.0	1		12/04/17 19:04		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:04	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:04	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:04	79-34-5	
Tetrachloroethene	**9.4**	ug/L	1.0	1		12/04/17 19:04	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:04	108-88-3	
Total Haloether	**202**	ug/L	1.0	1		12/04/17 19:04		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FMW-2-90 **Lab ID: 2066110004** Collected: 11/27/17 11:22 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	**2.5**	ug/L	1.0	1		12/04/17 19:04	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:04	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:04	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		12/04/17 19:04	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/04/17 19:04	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/04/17 19:04	1868-53-7	

Sample: MW-2C-3 **Lab ID: 2066110005** Collected: 11/27/17 12:15 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:22	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:22	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 19:22	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 19:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:22	100-41-4	
Haloether 229	**14.7**	ug/L	1.0	1		12/04/17 19:22		
Haloether 406	ND	ug/L	1.0	1		12/04/17 19:22		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:22		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:22		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-2C-3 **Lab ID: 2066110005** Collected: 11/27/17 12:15 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:22		
Haloether 508	**7.6**	ug/L	1.0	1		12/04/17 19:22		
Haloether 528	ND	ug/L	1.0	1		12/04/17 19:22		
Halomar	ND	ug/L	1.0	1		12/04/17 19:22		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:22	591-78-6	
Isoflurane	**76.6**	ug/L	1.0	1		12/04/17 19:22		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:22	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 19:22	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:22	108-88-3	
Total Haloether	**98.9**	ug/L	1.0	1		12/04/17 19:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 19:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:22	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/04/17 19:22	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 19:22	460-00-4	
Dibromofluoromethane (S)	95	%.	72-126	1		12/04/17 19:22	1868-53-7	

Sample: EB-20171128 **Lab ID: 2066110006** Collected: 11/28/17 07:50 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 19:40	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: EB-20171128 **Lab ID: 2066110006** Collected: 11/28/17 07:50 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 19:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 406	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 508	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 528	ND	ug/L	1.0	1		12/04/17 19:40		
Halomar	ND	ug/L	1.0	1		12/04/17 19:40		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:40	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 19:40		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:40	75-09-2	B,C9
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 19:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:40	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 19:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 19:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 19:40	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/04/17 19:40	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/04/17 19:40	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171128 **Lab ID: 2066110007** Collected: 11/28/17 09:20 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:57	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 19:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 19:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 406	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 508	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 528	ND	ug/L	1.0	1		12/04/17 19:57		
Halomar	ND	ug/L	1.0	1		12/04/17 19:57		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 19:57		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:57	75-09-2	B,C9
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:57	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 19:57	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 19:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171128 **Lab ID: 2066110007** Collected: 11/28/17 09:20 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 19:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:57	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		12/04/17 19:57	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/04/17 19:57	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/04/17 19:57	1868-53-7	

Sample: PCMW-2 **Lab ID: 2066110008** Collected: 11/28/17 10:07 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 20:15	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 20:15	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 20:15	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 20:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 20:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 20:15	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 20:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 20:15	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 20:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 20:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 20:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 20:15	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 20:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 20:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 20:15	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 20:15	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:15	75-35-4	
cis-1,2-Dichloroethene	**2.0**	ug/L	1.0	1		12/04/17 20:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 20:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:15	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 20:15	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 20:15	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 406	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 421	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 427	ND	ug/L	1.0	1		12/04/17 20:15		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: PCMW-2 **Lab ID: 2066110008** Collected: 11/28/17 10:07 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 508	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 528	ND	ug/L	1.0	1		12/04/17 20:15		
Halomar	ND	ug/L	1.0	1		12/04/17 20:15		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 20:15	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 20:15		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 20:15	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 20:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 20:15	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 20:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 20:15	79-34-5	
Tetrachloroethene	**10.5**	ug/L	1.0	1		12/04/17 20:15	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 20:15	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 20:15		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	79-00-5	
Trichloroethene	**1.5**	ug/L	1.0	1		12/04/17 20:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 20:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 20:15	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 20:15	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 20:15	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 20:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 20:15	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 20:15	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 20:15	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 20:15	1868-53-7	

Sample: GWDUP001 **Lab ID: 2066110009** Collected: 11/28/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 20:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 20:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 20:33	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 20:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 20:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 20:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 20:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 20:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 20:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 20:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 20:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 20:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 20:33	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: GWDUP001 **Lab ID: 2066110009** Collected: 11/28/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 20:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 20:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 20:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:33	75-35-4	
cis-1,2-Dichloroethene	**1.9**	ug/L	1.0	1		12/04/17 20:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 20:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 20:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 20:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 406	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 421	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 427	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 428	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 508	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 528	ND	ug/L	1.0	1		12/04/17 20:33		
Halomar	ND	ug/L	1.0	1		12/04/17 20:33		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 20:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 20:33		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 20:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 20:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 20:33	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 20:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 20:33	79-34-5	
Tetrachloroethene	**9.6**	ug/L	1.0	1		12/04/17 20:33	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 20:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 20:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	79-00-5	
Trichloroethene	**1.3**	ug/L	1.0	1		12/04/17 20:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 20:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 20:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 20:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 20:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 20:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 20:33	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 20:33	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/04/17 20:33	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 20:33	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-1B-1BR **Lab ID: 2066110010** Collected: 11/28/17 11:02 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 18:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 18:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 18:11	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 18:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 18:11	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 18:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 18:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 18:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 18:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 18:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 18:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 18:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 18:11	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 18:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 18:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 18:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:11	75-35-4	
cis-1,2-Dichloroethene	**3.0**	ug/L	1.0	1		12/04/17 18:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 18:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 18:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 18:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 406	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 421	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 427	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 428	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 508	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 528	ND	ug/L	1.0	1		12/04/17 18:11		
Halomar	ND	ug/L	1.0	1		12/04/17 18:11		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 18:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 18:11		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 18:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 18:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 18:11	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 18:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 18:11	79-34-5	
Tetrachloroethene	**33.7**	ug/L	1.0	1		12/04/17 18:11	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 18:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 18:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	79-00-5	
Trichloroethene	**2.6**	ug/L	1.0	1		12/04/17 18:11	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-1B-1BR **Lab ID: 2066110010** Collected: 11/28/17 11:02 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	**1.0**	ug/L	1.0	1		12/04/17 18:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 18:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 18:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 18:11	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 18:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 18:11	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/04/17 18:11	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/04/17 18:11	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/04/17 18:11	1868-53-7	

Sample: MW-1B-4 **Lab ID: 2066110011** Collected: 11/28/17 12:06 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 20:51	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 20:51	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 20:51	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 20:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 20:51	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 20:51	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 20:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 20:51	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 20:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 20:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 20:51	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 20:51	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 20:51	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 20:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 20:51	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 20:51	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 20:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:51	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 20:51	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 20:51	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 406	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 421	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 427	ND	ug/L	1.0	1		12/04/17 20:51		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-1B-4 **Lab ID: 2066110011** Collected: 11/28/17 12:06 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 508	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 528	ND	ug/L	1.0	1		12/04/17 20:51		
Halomar	ND	ug/L	1.0	1		12/04/17 20:51		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 20:51	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 20:51		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 20:51	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 20:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 20:51	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 20:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 20:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 20:51	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 20:51	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 20:51		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 20:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 20:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 20:51	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 20:51	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 20:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 20:51	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 20:51	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/04/17 20:51	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/04/17 20:51	1868-53-7	

Sample: EB-20171129 **Lab ID: 2066110012** Collected: 11/29/17 08:31 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 21:09	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 21:09	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 21:09	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 21:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 21:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 21:09	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 21:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 21:09	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 21:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 21:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 21:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 21:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 21:09	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: EB-20171129 **Lab ID: 2066110012** Collected: 11/29/17 08:31 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 21:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 21:09	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 21:09	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 21:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:09	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 21:09	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 21:09	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 406	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 421	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 427	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 428	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 508	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 528	ND	ug/L	1.0	1		12/04/17 21:09		
Halomar	ND	ug/L	1.0	1		12/04/17 21:09		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 21:09	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 21:09		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 21:09	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 21:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 21:09	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 21:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 21:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 21:09	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 21:09	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 21:09		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 21:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 21:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 21:09	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 21:09	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 21:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 21:09	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 21:09	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/04/17 21:09	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 21:09	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171129 **Lab ID: 2066110013** Collected: 11/29/17 10:23 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 21:27	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 21:27	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 21:27	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 21:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 21:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 21:27	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 21:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 21:27	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 21:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 21:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 21:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 21:27	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 21:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 21:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 21:27	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 21:27	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 21:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:27	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 21:27	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 21:27	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 406	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 421	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 427	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 428	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 508	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 528	ND	ug/L	1.0	1		12/04/17 21:27		
Halomar	ND	ug/L	1.0	1		12/04/17 21:27		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 21:27	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 21:27		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 21:27	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 21:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 21:27	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 21:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 21:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 21:27	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 21:27	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 21:27		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171129 **Lab ID: 2066110013** Collected: 11/29/17 10:23 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 21:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 21:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 21:27	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 21:27	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 21:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 21:27	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 21:27	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 21:27	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 21:27	1868-53-7	

Sample: ES-21 **Lab ID: 2066110014** Collected: 11/29/17 12:44 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/05/17 11:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/05/17 11:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/05/17 11:25	107-13-1	
Benzene	ND	ug/L	1.0	1		12/05/17 11:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/05/17 11:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/05/17 11:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/05/17 11:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/05/17 11:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/05/17 11:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/05/17 11:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/05/17 11:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/05/17 11:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/05/17 11:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/05/17 11:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/05/17 11:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/05/17 11:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/05/17 11:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/05/17 11:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/05/17 11:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/05/17 11:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/05/17 11:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 406	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 421	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 427	ND	ug/L	1.0	1		12/05/17 11:25		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: ES-21 **Lab ID: 2066110014** Collected: 11/29/17 12:44 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 508	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 528	ND	ug/L	1.0	1		12/05/17 11:25		
Halomar	ND	ug/L	1.0	1		12/05/17 11:25		
2-Hexanone	ND	ug/L	2.0	1		12/05/17 11:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/05/17 11:25		
Methoxyflurane	ND	ug/L	1.0	1		12/05/17 11:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/05/17 11:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/05/17 11:25	108-10-1	
Styrene	ND	ug/L	1.0	1		12/05/17 11:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/05/17 11:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/05/17 11:25	127-18-4	
Toluene	ND	ug/L	1.0	1		12/05/17 11:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/05/17 11:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/05/17 11:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/05/17 11:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/05/17 11:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/05/17 11:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/05/17 11:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/05/17 11:25	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/05/17 11:25	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/05/17 11:25	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/05/17 11:25	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066110

QC Batch: 95856 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2066110001, 2066110002, 2066110003, 2066110004, 2066110005, 2066110006, 2066110007, 2066110008, 2066110009, 2066110010, 2066110011, 2066110012, 2066110013, 2066110014

METHOD BLANK: 412213 | Matrix: Water
Associated Lab Samples: 2066110001, 2066110002, 2066110003, 2066110004, 2066110005, 2066110006, 2066110007, 2066110008, 2066110009, 2066110010, 2066110011, 2066110012, 2066110013, 2066110014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/04/17 16:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/04/17 16:25	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/04/17 16:25	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/04/17 16:25	
1,1-Dichloroethane	ug/L	ND	1.0	12/04/17 16:25	
1,1-Dichloroethene	ug/L	ND	1.0	12/04/17 16:25	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/04/17 16:25	
1,2-Dichloroethane	ug/L	ND	1.0	12/04/17 16:25	
1,2-Dichloropropane	ug/L	ND	1.0	12/04/17 16:25	
2-Butanone (MEK)	ug/L	ND	2.0	12/04/17 16:25	
2-Hexanone	ug/L	ND	2.0	12/04/17 16:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/04/17 16:25	
Acetone	ug/L	ND	4.0	12/04/17 16:25	
Acrolein	ug/L	ND	8.0	12/04/17 16:25	
Acrylonitrile	ug/L	ND	4.0	12/04/17 16:25	
Benzene	ug/L	ND	1.0	12/04/17 16:25	
Bromodichloromethane	ug/L	ND	1.0	12/04/17 16:25	
Bromoform	ug/L	ND	1.0	12/04/17 16:25	
Bromomethane	ug/L	ND	1.0	12/04/17 16:25	
Carbon disulfide	ug/L	ND	1.0	12/04/17 16:25	
Carbon tetrachloride	ug/L	ND	1.0	12/04/17 16:25	
Chlorobenzene	ug/L	ND	1.0	12/04/17 16:25	
Chloroethane	ug/L	ND	1.0	12/04/17 16:25	
Chloroform	ug/L	ND	1.0	12/04/17 16:25	
Chloromethane	ug/L	ND	1.0	12/04/17 16:25	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/04/17 16:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/04/17 16:25	
Dibromochloromethane	ug/L	ND	1.0	12/04/17 16:25	
Dibromomethane	ug/L	ND	1.0	12/04/17 16:25	
Enflurane	ug/L	ND	1.0	12/04/17 16:25	
Ethylbenzene	ug/L	ND	1.0	12/04/17 16:25	
Haloether 229	ug/L	ND	1.0	12/04/17 16:25	
Haloether 406	ug/L	ND	1.0	12/04/17 16:25	
Haloether 421	ug/L	ND	1.0	12/04/17 16:25	
Haloether 427	ug/L	ND	1.0	12/04/17 16:25	
Haloether 428	ug/L	ND	1.0	12/04/17 16:25	
Haloether 508	ug/L	ND	1.0	12/04/17 16:25	
Haloether 528	ug/L	ND	1.0	12/04/17 16:25	
Halomar	ug/L	ND	1.0	12/04/17 16:25	
Isoflurane	ug/L	ND	1.0	12/04/17 16:25	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066110

METHOD BLANK: 412213 Matrix: Water

Associated Lab Samples: 2066110001, 2066110002, 2066110003, 2066110004, 2066110005, 2066110006, 2066110007, 2066110008, 2066110009, 2066110010, 2066110011, 2066110012, 2066110013, 2066110014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	12/04/17 16:25	
Methoxyflurane	ug/L	ND	1.0	12/04/17 16:25	
Methylene Chloride	ug/L	ND	5.0	12/04/17 16:25	B,C9
o-Xylene	ug/L	ND	1.0	12/04/17 16:25	
Styrene	ug/L	ND	1.0	12/04/17 16:25	
Tetrachloroethene	ug/L	ND	1.0	12/04/17 16:25	
Toluene	ug/L	ND	1.0	12/04/17 16:25	
Total Haloether	ug/L	ND	1.0	12/04/17 16:25	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/04/17 16:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/04/17 16:25	
Trichloroethene	ug/L	ND	1.0	12/04/17 16:25	
Trichlorofluoromethane	ug/L	ND	1.0	12/04/17 16:25	
Vinyl chloride	ug/L	ND	1.0	12/04/17 16:25	
4-Bromofluorobenzene (S)	%.	100	68-124	12/04/17 16:25	
Dibromofluoromethane (S)	%.	98	72-126	12/04/17 16:25	
Toluene-d8 (S)	%.	102	79-119	12/04/17 16:25	

METHOD BLANK: 412510 Matrix: Water

Associated Lab Samples: 2066110001, 2066110002, 2066110003, 2066110004, 2066110005, 2066110006, 2066110007, 2066110008, 2066110009, 2066110010, 2066110011, 2066110012, 2066110013, 2066110014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/05/17 10:31	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/05/17 10:31	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/05/17 10:31	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/05/17 10:31	
1,1-Dichloroethane	ug/L	ND	1.0	12/05/17 10:31	
1,1-Dichloroethene	ug/L	ND	1.0	12/05/17 10:31	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/05/17 10:31	
1,2-Dichloroethane	ug/L	ND	1.0	12/05/17 10:31	
1,2-Dichloropropane	ug/L	ND	1.0	12/05/17 10:31	
2-Butanone (MEK)	ug/L	ND	2.0	12/05/17 10:31	
2-Hexanone	ug/L	ND	2.0	12/05/17 10:31	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/05/17 10:31	
Acetone	ug/L	ND	4.0	12/05/17 10:31	
Acrolein	ug/L	ND	8.0	12/05/17 10:31	
Acrylonitrile	ug/L	ND	4.0	12/05/17 10:31	
Benzene	ug/L	ND	1.0	12/05/17 10:31	
Bromodichloromethane	ug/L	ND	1.0	12/05/17 10:31	
Bromoform	ug/L	ND	1.0	12/05/17 10:31	
Bromomethane	ug/L	ND	1.0	12/05/17 10:31	
Carbon disulfide	ug/L	ND	1.0	12/05/17 10:31	
Carbon tetrachloride	ug/L	ND	1.0	12/05/17 10:31	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066110

METHOD BLANK: 412510 Matrix: Water

Associated Lab Samples: 2066110001, 2066110002, 2066110003, 2066110004, 2066110005, 2066110006, 2066110007, 2066110008, 2066110009, 2066110010, 2066110011, 2066110012, 2066110013, 2066110014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/L	ND	1.0	12/05/17 10:31	
Chloroethane	ug/L	ND	1.0	12/05/17 10:31	
Chloroform	ug/L	ND	1.0	12/05/17 10:31	
Chloromethane	ug/L	ND	1.0	12/05/17 10:31	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/05/17 10:31	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/05/17 10:31	
Dibromochloromethane	ug/L	ND	1.0	12/05/17 10:31	
Dibromomethane	ug/L	ND	1.0	12/05/17 10:31	
Enflurane	ug/L	ND	1.0	12/05/17 10:31	
Ethylbenzene	ug/L	ND	1.0	12/05/17 10:31	
Haloether 229	ug/L	ND	1.0	12/05/17 10:31	
Haloether 406	ug/L	ND	1.0	12/05/17 10:31	
Haloether 421	ug/L	ND	1.0	12/05/17 10:31	
Haloether 427	ug/L	ND	1.0	12/05/17 10:31	
Haloether 428	ug/L	ND	1.0	12/05/17 10:31	
Haloether 508	ug/L	ND	1.0	12/05/17 10:31	
Haloether 528	ug/L	ND	1.0	12/05/17 10:31	
Halomar	ug/L	ND	1.0	12/05/17 10:31	
Isoflurane	ug/L	ND	1.0	12/05/17 10:31	
m&p-Xylene	ug/L	ND	2.0	12/05/17 10:31	
Methoxyflurane	ug/L	ND	1.0	12/05/17 10:31	
Methylene Chloride	ug/L	ND	5.0	12/05/17 10:31	B,C9
o-Xylene	ug/L	ND	1.0	12/05/17 10:31	
Styrene	ug/L	ND	1.0	12/05/17 10:31	
Tetrachloroethene	ug/L	ND	1.0	12/05/17 10:31	
Toluene	ug/L	ND	1.0	12/05/17 10:31	
Total Haloether	ug/L	ND	1.0	12/05/17 10:31	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/05/17 10:31	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/05/17 10:31	
Trichloroethene	ug/L	ND	1.0	12/05/17 10:31	
Trichlorofluoromethane	ug/L	ND	1.0	12/05/17 10:31	
Vinyl chloride	ug/L	ND	1.0	12/05/17 10:31	
4-Bromofluorobenzene (S)	%.	100	68-124	12/05/17 10:31	
Dibromofluoromethane (S)	%.	101	72-126	12/05/17 10:31	
Toluene-d8 (S)	%.	101	79-119	12/05/17 10:31	

LABORATORY CONTROL SAMPLE: 412214

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.7	99	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	52.1	104	15-179	
1,1,2-Trichloroethane	ug/L	50	51.1	102	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	51.9	104	38-121	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066110

LABORATORY CONTROL SAMPLE: 412214

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	50	51.3	103	63-129	
1,1-Dichloroethene	ug/L	50	51.5	103	51-139	
1,2,3-Trichloropropane	ug/L	50	52.0	104	13-187	
1,2-Dichloroethane	ug/L	50	50.1	100	57-148	
1,2-Dichloropropane	ug/L	50	49.3	99	66-128	
2-Butanone (MEK)	ug/L	50	54.6	109	32-183	
2-Hexanone	ug/L	50	56.9	114	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	53.0	106	26-171	
Acetone	ug/L	50	64.2	128	22-165	
Acrolein	ug/L	50	50.4	101	10-131	
Acrylonitrile	ug/L	50	48.5	97	18-149	
Benzene	ug/L	50	50.0	100	62-131	
Bromodichloromethane	ug/L	50	52.0	104	69-132	
Bromoform	ug/L	50	49.9	100	35-166	
Bromomethane	ug/L	50	50.7	101	34-158	
Carbon disulfide	ug/L	50	49.8	100	31-128	
Carbon tetrachloride	ug/L	50	55.3	111	54-144	
Chlorobenzene	ug/L	50	55.9	112	70-127	
Chloroethane	ug/L	50	44.7	89	17-195	
Chloroform	ug/L	50	51.6	103	73-134	
Chloromethane	ug/L	50	46.3	93	17-153	
cis-1,2-Dichloroethene	ug/L	50	49.3	99	68-129	
cis-1,3-Dichloropropene	ug/L	50	54.5	109	72-138	
Dibromochloromethane	ug/L	50	49.5	99	49-146	
Dibromomethane	ug/L	50	51.2	102	56-145	
Enflurane	ug/L	50	52.5	105	56-135	
Ethylbenzene	ug/L	50	53.0	106	66-126	
Haloether 229	ug/L	50	35.9	72	62-123	
Haloether 406	ug/L	50	51.3	103	62-134	
Haloether 421	ug/L	50	48.6	97	70-128	
Haloether 427	ug/L	50	54.2	108	69-153	
Haloether 428	ug/L	50	52.0	104	70-134	
Haloether 508	ug/L	50	49.7	99	52-139	
Haloether 528	ug/L	50	52.2	104	48-157	
Halomar	ug/L	50	50.1	100	62-128	
Isoflurane	ug/L	50	50.4	101	61-132	
m&p-Xylene	ug/L	100	104	104	65-129	
Methoxyflurane	ug/L	50	48.8	98	72-124	
Methylene Chloride	ug/L	50	46.6	93	46-168	
o-Xylene	ug/L	50	51.8	104	65-124	
Styrene	ug/L	50	54.7	109	72-133	
Tetrachloroethene	ug/L	50	57.4	115	46-157	
Toluene	ug/L	50	50.8	102	69-126	
Total Haloether	ug/L		546			
trans-1,2-Dichloroethene	ug/L	50	52.7	105	60-129	
trans-1,3-Dichloropropene	ug/L	50	56.1	112	59-149	
Trichloroethene	ug/L	50	49.4	99	67-132	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066110

LABORATORY CONTROL SAMPLE: 412214

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichlorofluoromethane	ug/L	50	49.5	99	39-171	
Vinyl chloride	ug/L	50	42.2	84	27-149	
4-Bromofluorobenzene (S)	%.			100	68-124	
Dibromofluoromethane (S)	%.			97	72-126	
Toluene-d8 (S)	%.			99	79-119	

LABORATORY CONTROL SAMPLE: 412511

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	46.9	94	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	52.9	106	15-179	
1,1,2-Trichloroethane	ug/L	50	46.8	94	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	47.2	94	38-121	
1,1-Dichloroethane	ug/L	50	47.9	96	63-129	
1,1-Dichloroethene	ug/L	50	47.0	94	51-139	
1,2,3-Trichloropropane	ug/L	50	54.4	109	13-187	
1,2-Dichloroethane	ug/L	50	45.5	91	57-148	
1,2-Dichloropropane	ug/L	50	48.8	98	66-128	
2-Butanone (MEK)	ug/L	50	43.7	87	32-183	
2-Hexanone	ug/L	50	52.1	104	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	54.7	109	26-171	
Acetone	ug/L	50	45.0	90	22-165	
Acrolein	ug/L	50	46.4	93	10-131	
Acrylonitrile	ug/L	50	45.7	91	18-149	
Benzene	ug/L	50	48.0	96	62-131	
Bromodichloromethane	ug/L	50	49.8	100	69-132	
Bromoform	ug/L	50	46.3	93	35-166	
Bromomethane	ug/L	50	47.7	95	34-158	
Carbon disulfide	ug/L	50	46.5	93	31-128	
Carbon tetrachloride	ug/L	50	50.9	102	54-144	
Chlorobenzene	ug/L	50	54.5	109	70-127	
Chloroethane	ug/L	50	42.9	86	17-195	
Chloroform	ug/L	50	47.8	96	73-134	
Chloromethane	ug/L	50	45.9	92	17-153	
cis-1,2-Dichloroethene	ug/L	50	45.5	91	68-129	
cis-1,3-Dichloropropene	ug/L	50	51.3	103	72-138	
Dibromochloromethane	ug/L	50	47.6	95	49-146	
Dibromomethane	ug/L	50	48.4	97	56-145	
Enflurane	ug/L	50	49.8	100	56-135	
Ethylbenzene	ug/L	50	50.8	102	66-126	
Haloether 229	ug/L	50	36.6	73	62-123	
Haloether 406	ug/L	50	49.5	99	62-134	
Haloether 421	ug/L	50	46.8	94	70-128	
Haloether 427	ug/L	50	51.6	103	69-153	
Haloether 428	ug/L	50	48.6	97	70-134	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066110

LABORATORY CONTROL SAMPLE: 412511

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Haloether 508	ug/L	50	46.3	93	52-139	
Haloether 528	ug/L	50	46.9	94	48-157	
Halomar	ug/L	50	48.1	96	62-128	
Isoflurane	ug/L	50	48.0	96	61-132	
m&p-Xylene	ug/L	100	101	101	65-129	
Methoxyflurane	ug/L	50	46.3	93	72-124	
Methylene Chloride	ug/L	50	46.8	94	46-168	
o-Xylene	ug/L	50	51.8	104	65-124	
Styrene	ug/L	50	52.7	105	72-133	
Tetrachloroethene	ug/L	50	55.3	111	46-157	
Toluene	ug/L	50	48.9	98	69-126	
Total Haloether	ug/L		519			
trans-1,2-Dichloroethene	ug/L	50	48.0	96	60-129	
trans-1,3-Dichloropropene	ug/L	50	51.2	102	59-149	
Trichloroethene	ug/L	50	46.8	94	67-132	
Trichlorofluoromethane	ug/L	50	47.9	96	39-171	
Vinyl chloride	ug/L	50	40.0	80	27-149	
4-Bromofluorobenzene (S)	%.			101	68-124	
Dibromofluoromethane (S)	%.			99	72-126	
Toluene-d8 (S)	%.			99	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 412215 412216

Parameter	Units	2066110010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	55.3	48.8	111	98	54-137	13	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	52.8	48.6	106	97	15-187	8	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	50.5	44.9	101	90	59-148	12	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	56.3	49.0	113	98	40-117	14	20	
1,1-Dichloroethane	ug/L	ND	50	50	56.1	47.3	112	95	59-133	17	20	
1,1-Dichloroethene	ug/L	ND	50	50	56.7	48.2	113	96	44-146	16	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	56.0	51.3	112	103	14-199	9	20	
1,2-Dichloroethane	ug/L	ND	50	50	50.5	45.7	101	91	56-154	10	20	
1,2-Dichloropropane	ug/L	ND	50	50	51.8	47.1	104	94	62-135	10	20	
2-Butanone (MEK)	ug/L	ND	50	50	48.2	42.5	96	85	20-205	13	20	
2-Hexanone	ug/L	ND	50	50	54.5	48.9	109	98	25-189	11	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	56.4	49.9	113	100	23-184	12	20	
Acetone	ug/L	ND	50	50	49.8	43.9	93	82	11-217	13	20	
Acrolein	ug/L	ND	50	50	50.9	45.2	102	90	10-142	12	20	
Acrylonitrile	ug/L	ND	50	50	50.7	44.2	101	88	20-164	14	20	
Benzene	ug/L	ND	50	50	53.7	48.6	106	95	52-141	10	20	
Bromodichloromethane	ug/L	ND	50	50	53.7	48.2	107	96	70-134	11	20	
Bromoform	ug/L	ND	50	50	50.9	45.9	102	92	37-171	10	20	
Bromomethane	ug/L	ND	50	50	55.4	49.8	111	100	34-155	11	20	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 412215 412216

Parameter	Units	2066110010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Carbon disulfide	ug/L	ND	50	50	58.8	48.4	118	97	28-130	19	20	
Carbon tetrachloride	ug/L	ND	50	50	59.0	54.3	118	109	48-146	8	20	
Chlorobenzene	ug/L	ND	50	50	59.0	52.8	118	106	67-129	11	20	
Chloroethane	ug/L	ND	50	50	51.0	45.6	102	91	12-192	11	20	
Chloroform	ug/L	ND	50	50	57.1	48.2	114	96	66-143	17	20	
Chloromethane	ug/L	ND	50	50	53.7	47.2	107	94	14-155	13	20	
cis-1,2-Dichloroethene	ug/L	3.0	50	50	55.1	48.8	104	92	56-141	12	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	55.3	49.1	111	98	70-139	12	20	
Dibromochloromethane	ug/L	ND	50	50	51.6	46.0	103	92	50-150	11	20	
Dibromomethane	ug/L	ND	50	50	51.2	46.0	102	92	58-153	11	20	
Enflurane	ug/L	ND	50	50	58.9	52.7	118	105	63-126	11	20	
Ethylbenzene	ug/L	ND	50	50	57.4	50.9	115	102	57-135	12	20	
Haloether 229	ug/L	ND	50	50	45.5	39.8	91	80	56-127	13	20	
Haloether 406	ug/L	ND	50	50	56.8	51.0	114	102	68-128	11	20	
Haloether 421	ug/L	ND	50	50	52.2	47.1	104	94	74-120	10	20	
Haloether 427	ug/L	ND	50	50	56.8	53.9	114	108	78-120	5	20	
Haloether 428	ug/L	ND	50	50	55.0	51.8	110	104	74-125	6	20	
Haloether 508	ug/L	ND	50	50	58.1	50.6	116	101	28-156	14	20	
Haloether 528	ug/L	ND	50	50	54.2	47.1	108	94	45-142	14	20	
Halomar	ug/L	ND	50	50	55.1	47.2	110	94	67-123	15	20	
Isoflurane	ug/L	ND	50	50	58.3	51.6	117	103	45-140	12	20	
m&p-Xylene	ug/L	ND	100	100	111	102	111	102	56-136	9	20	
Methoxyflurane	ug/L	ND	50	50	49.2	46.1	98	92	75-119	7	20	
Methylene Chloride	ug/L	ND	50	50	49.9	44.2	100	88	45-166	12	20	
o-Xylene	ug/L	ND	50	50	55.5	50.5	111	101	57-133	9	20	
Styrene	ug/L	ND	50	50	56.5	51.5	113	103	58-144	9	20	
Tetrachloroethene	ug/L	33.7	50	50	101	92.0	135	116	48-143	10	20	
Toluene	ug/L	ND	50	50	53.5	49.4	107	99	59-136	8	20	
Total Haloether	ug/L	ND			600	539				11		
trans-1,2-Dichloroethene	ug/L	ND	50	50	58.2	49.6	116	99	57-132	16	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	54.0	49.8	108	100	59-154	8	20	
Trichloroethene	ug/L	2.6	50	50	57.4	50.8	110	96	58-140	12	20	
Trichlorofluoromethane	ug/L	1.0	50	50	59.4	52.1	117	102	24-175	13	20	
Vinyl chloride	ug/L	ND	50	50	50.7	43.2	101	86	21-150	16	20	
4-Bromofluorobenzene (S)	%.						98	100	68-124			
Dibromofluoromethane (S)	%.						99	97	72-126			
Toluene-d8 (S)	%.						96	100	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2066110

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
C9	Common Laboratory Contaminant.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2066110

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2066110001	**TB-20171127**	EPA 5030B/8260	95856		
2066110002	**EB-20171127**	EPA 5030B/8260	95856		
2066110003	**FB-20171127**	EPA 5030B/8260	95856		
2066110004	**FMW-2-90**	EPA 5030B/8260	95856		
2066110005	**MW-2C-3**	EPA 5030B/8260	95856		
2066110006	**EB-20171128**	EPA 5030B/8260	95856		
2066110007	**FB-20171128**	EPA 5030B/8260	95856		
2066110008	**PCMW-2**	EPA 5030B/8260	95856		
2066110009	**GWDUP001**	EPA 5030B/8260	95856		
2066110010	**MW-1B-1BR**	EPA 5030B/8260	95856		
2066110011	**MW-1B-4**	EPA 5030B/8260	95856		
2066110012	**EB-20171129**	EPA 5030B/8260	95856		
2066110013	**FB-20171129**	EPA 5030B/8260	95856		
2066110014	**ES-21**	EPA 5030B/8260	95856		

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CHAIN-OF-CUSTODY / Analytical Requ

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fi

WO# : 2066110

2066110

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171127	WT	G			11/27/17	LAB		2				2							X			
2	EB-20171127	WT	G			11/27/17	0935		3				3						X				
3	FB-20171127	WT	G			11/27/17	0957		3				3						X				
4	FMW-2-90	WT	G			11/27/17	1122		3				3						X				
5	MW-2C-3	WT	G			11/27/17	1215		3				3						X				
6	EB-20171128	WT	G			11/28/17	0950		3				3						X				
7	FB-20171128	WT	G			11/28/17	0920		3				3						X				
8	PCMW-2	WT	G			11/28/17	1009		3				3						X				
9	GWDUP001	WT	G			11/28/17	—		3				3						X				
10	MW-1B-1BR	WT	G			11/28/17	1102		3				3						X				
11	MW-1B-1BR (MS)	WT	G			11/28/17	1102		3				3						X				
12	MW-1B-1BR (MSD)	WT	G			11/28/17	1102		3				3						X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	11/28/17	1545	[illegible] / Pace	11-28-17	1545	
	Fedex	11/29/17	0815	Fedex / Pace	11/29/17	0815	4 4 4 4

SAMPLER NAME AND SIGNATURE:
PRINT Name of SAMPLER: Andrés Colon
SIGNATURE of SAMPLER: [signature]
DATE Signed: 11/28/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17(
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	MW-1B-4	WT	G			11/29/17	1206		3				3						X				
2	EB-20171129	WT	G			11/29/17	0831		3				3						X				
3	FB-20171129	WT	G			11/29/17	1023		3				3						X				
4	ES-21	WT	G			11/29/17	1244		3				3						X				
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	11/29/17	1545	[signature] / Pace	11-28-17	1545	
	Fed Ex	11/17	0915	Fed Ex [signature]	11/17	0915	4.4

SAMPLE CONDITIONS			
TEMP in C	4.4		
Received on Ice (Y/N)	Y		
Custody Sealed Cooler (Y/N)	Y		
Samples Intact (Y/N)	Y		

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 11/29/17

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upo

P

WO#: 2066110

PM: CJM Due Date: 12/15/17
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12/1/17 CMB

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐Yes	☐No	☑N/A	1	
Chain of Custody Present:	☑Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6	
Sufficient Volume:	☑Yes	☐No	☐N/A	7	
Correct Containers Used:	☑Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9	
Sample Labels match COC:	☑Yes	☐No	☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14	
Trip Blank Present:	☑Yes	☐No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

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(504)469-0333

December 18, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2066562

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 05, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2066562

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2066562

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2066562001	**EB-20171130**	Water	11/30/17 08:26	12/05/17 11:15
2066562002	**TB-20171130**	Water	11/30/17 00:00	12/05/17 11:15
2066562003	**FB-20171130**	Water	11/30/17 09:19	12/05/17 11:15
2066562004	**FMW-3-90**	Water	11/30/17 10:43	12/05/17 11:15
2066562005	**MW-4B-3**	Water	11/30/17 11:58	12/05/17 11:15
2066562006	**EB-20171201**	Water	12/01/17 08:45	12/05/17 11:15
2066562007	**FB-20171201**	Water	12/01/17 09:30	12/05/17 11:15
2066562008	**FMW-1-90**	Water	12/01/17 11:15	12/05/17 11:15
2066562009	**FMW-1-20**	Water	12/01/17 12:25	12/05/17 11:15

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2066562

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2066562001	**EB-20171130**	EPA 5030B/8260	GEM	56	PASI-N
2066562002	**TB-20171130**	EPA 5030B/8260	GEM	56	PASI-N
2066562003	**FB-20171130**	EPA 5030B/8260	GEM	56	PASI-N
2066562004	**FMW-3-90**	EPA 5030B/8260	GEM	56	PASI-N
2066562005	**MW-4B-3**	EPA 5030B/8260	GEM	56	PASI-N
2066562006	**EB-20171201**	EPA 5030B/8260	GEM	56	PASI-N
2066562007	**FB-20171201**	EPA 5030B/8260	GEM	56	PASI-N
2066562008	**FMW-1-90**	EPA 5030B/8260	GEM	56	PASI-N
2066562009	**FMW-1-20**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2066562

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 18, 2017

General Information:
9 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 96417

C9: Common Laboratory Contaminant.
- BLANK (Lab ID: 414770)
  - Methylene Chloride

This data package has been reviewed for quality and completeness and is approved for release.

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St. Rose, LA 70087
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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: EB-20171130 **Lab ID: 2066562001** Collected: 11/30/17 08:26 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.6**	ug/L	4.0	1		12/11/17 12:31	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 12:31	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 12:31	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 12:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 12:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 12:31	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 12:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 12:31	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 12:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 12:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 12:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 12:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 12:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 12:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 12:31	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 12:31	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 12:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:31	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 12:31	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 12:31	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 406	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 421	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 427	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 428	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 508	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 528	ND	ug/L	1.0	1		12/11/17 12:31		
Halomar	ND	ug/L	1.0	1		12/11/17 12:31		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 12:31	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 12:31		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 12:31	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 12:31	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 12:31	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 12:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 12:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 12:31	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 12:31	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 12:31		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: EB-20171130 **Lab ID: 2066562001** Collected: 11/30/17 08:26 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 12:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 12:31	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 12:31	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 12:31	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 12:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 12:31	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/11/17 12:31	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/11/17 12:31	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		12/11/17 12:31	1868-53-7	

Sample: TB-20171130 **Lab ID: 2066562002** Collected: 11/30/17 00:00 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 12:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 12:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 12:48	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 12:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 12:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 12:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 12:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 12:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 12:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 12:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 12:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 12:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 12:48	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 12:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 12:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 12:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 12:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:48	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 12:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 12:48	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 406	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 421	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 427	ND	ug/L	1.0	1		12/11/17 12:48		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: TB-20171130 **Lab ID: 2066562002** Collected: 11/30/17 00:00 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 508	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 528	ND	ug/L	1.0	1		12/11/17 12:48		
Halomar	ND	ug/L	1.0	1		12/11/17 12:48		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 12:48	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 12:48		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 12:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 12:48	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 12:48	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 12:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 12:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 12:48	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 12:48	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 12:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 12:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 12:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 12:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 12:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 12:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 12:48	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/11/17 12:48	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/11/17 12:48	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/11/17 12:48	1868-53-7	

Sample: FB-20171130 **Lab ID: 2066562003** Collected: 11/30/17 09:19 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.4**	ug/L	4.0	1		12/11/17 13:06	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 13:06	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 13:06	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 13:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 13:06	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 13:06	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 13:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 13:06	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 13:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 13:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 13:06	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 13:06	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 13:06	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FB-20171130 **Lab ID: 2066562003** Collected: 11/30/17 09:19 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/11/17 13:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 13:06	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 13:06	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 13:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:06	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 13:06	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 13:06	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 406	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 421	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 427	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 428	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 508	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 528	ND	ug/L	1.0	1		12/11/17 13:06		
Halomar	ND	ug/L	1.0	1		12/11/17 13:06		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 13:06	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 13:06		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 13:06	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 13:06	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 13:06	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 13:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 13:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 13:06	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 13:06	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 13:06		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 13:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 13:06	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 13:06	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 13:06	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 13:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 13:06	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 13:06	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/11/17 13:06	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/11/17 13:06	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-3-90 **Lab ID: 2066562004** Collected: 11/30/17 10:43 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 12:13	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 12:13	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 12:13	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 12:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 12:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 12:13	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 12:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 12:13	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 12:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 12:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 12:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 12:13	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 12:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 12:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 12:13	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 12:13	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 12:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:13	10061-02-6	
Enflurane	**2.3**	ug/L	1.0	1		12/11/17 12:13	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 12:13	100-41-4	
Haloether 229	**1.7**	ug/L	1.0	1		12/11/17 12:13		
Haloether 406	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 421	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 427	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 428	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 508	**40.0**	ug/L	1.0	1		12/11/17 12:13		
Haloether 528	ND	ug/L	1.0	1		12/11/17 12:13		
Halomar	**1.3**	ug/L	1.0	1		12/11/17 12:13		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 12:13	591-78-6	
Isoflurane	**12.7**	ug/L	1.0	1		12/11/17 12:13		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 12:13	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 12:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 12:13	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 12:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 12:13	79-34-5	
Tetrachloroethene	**7.5**	ug/L	1.0	1		12/11/17 12:13	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 12:13	108-88-3	
Total Haloether	**58.1**	ug/L	1.0	1		12/11/17 12:13		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-3-90 **Lab ID: 2066562004** Collected: 11/30/17 10:43 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 12:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 12:13	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 12:13	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 12:13	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 12:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 12:13	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/11/17 12:13	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/11/17 12:13	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	1		12/11/17 12:13	1868-53-7	

Sample: MW-4B-3 **Lab ID: 2066562005** Collected: 11/30/17 11:58 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 13:24	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 13:24	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 13:24	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 13:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 13:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 13:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 13:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 13:24	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 13:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 13:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 13:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 13:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 13:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 13:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 13:24	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 13:24	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 13:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:24	10061-02-6	
Enflurane	**1.3**	ug/L	1.0	1		12/11/17 13:24	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 13:24	100-41-4	
Haloether 229	**1.0**	ug/L	1.0	1		12/11/17 13:24		
Haloether 406	ND	ug/L	1.0	1		12/11/17 13:24		
Haloether 421	ND	ug/L	1.0	1		12/11/17 13:24		
Haloether 427	ND	ug/L	1.0	1		12/11/17 13:24		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: MW-4B-3 **Lab ID: 2066562005** Collected: 11/30/17 11:58 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/11/17 13:24		
Haloether 508	**28.3**	ug/L	1.0	1		12/11/17 13:24		
Haloether 528	ND	ug/L	1.0	1		12/11/17 13:24		
Halomar	ND	ug/L	1.0	1		12/11/17 13:24		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 13:24	591-78-6	
Isoflurane	**10.6**	ug/L	1.0	1		12/11/17 13:24		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 13:24	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 13:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 13:24	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 13:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 13:24	79-34-5	
Tetrachloroethene	**2.7**	ug/L	1.0	1		12/11/17 13:24	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 13:24	108-88-3	
Total Haloether	**41.3**	ug/L	1.0	1		12/11/17 13:24		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 13:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 13:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 13:24	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 13:24	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 13:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 13:24	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 13:24	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		12/11/17 13:24	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		12/11/17 13:24	1868-53-7	

Sample: EB-20171201 **Lab ID: 2066562006** Collected: 12/01/17 08:45 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 13:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 13:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 13:42	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 13:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 13:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 13:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 13:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 13:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 13:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 13:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 13:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 13:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 13:42	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: EB-20171201 **Lab ID: 2066562006** Collected: 12/01/17 08:45 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/11/17 13:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 13:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 13:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 13:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 13:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 13:42	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 406	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 421	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 427	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 428	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 508	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 528	ND	ug/L	1.0	1		12/11/17 13:42		
Halomar	ND	ug/L	1.0	1		12/11/17 13:42		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 13:42	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 13:42		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 13:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 13:42	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 13:42	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 13:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 13:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 13:42	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 13:42	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 13:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 13:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 13:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 13:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 13:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 13:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 13:42	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 13:42	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/11/17 13:42	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	1		12/11/17 13:42	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FB-20171201 **Lab ID: 2066562007** Collected: 12/01/17 09:30 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.8**	ug/L	4.0	1		12/11/17 14:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 14:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 14:00	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 14:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 14:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 14:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 14:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 14:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 14:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 14:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 14:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 14:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 14:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 14:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 406	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 421	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 427	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 428	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 508	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 528	ND	ug/L	1.0	1		12/11/17 14:00		
Halomar	ND	ug/L	1.0	1		12/11/17 14:00		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 14:00	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 14:00		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 14:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 14:00	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 14:00	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 14:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 14:00	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 14:00	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 14:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FB-20171201 **Lab ID: 2066562007** Collected: 12/01/17 09:30 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 14:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 14:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 14:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 14:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 14:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 14:00	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/11/17 14:00	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/11/17 14:00	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		12/11/17 14:00	1868-53-7	

Sample: FMW-1-90 **Lab ID: 2066562008** Collected: 12/01/17 11:15 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 14:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 14:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 14:18	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 14:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 14:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 14:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 14:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 14:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 14:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 14:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 14:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 14:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 14:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 14:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 14:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 14:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:18	10061-02-6	
Enflurane	**1.3**	ug/L	1.0	1		12/11/17 14:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 14:18	100-41-4	
Haloether 229	**2.0**	ug/L	1.0	1		12/11/17 14:18		
Haloether 406	ND	ug/L	1.0	1		12/11/17 14:18		
Haloether 421	ND	ug/L	1.0	1		12/11/17 14:18		
Haloether 427	ND	ug/L	1.0	1		12/11/17 14:18		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-1-90 **Lab ID: 2066562008** Collected: 12/01/17 11:15 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/11/17 14:18		
Haloether 508	**3.9**	ug/L	1.0	1		12/11/17 14:18		
Haloether 528	ND	ug/L	1.0	1		12/11/17 14:18		
Halomar	ND	ug/L	1.0	1		12/11/17 14:18		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 14:18	591-78-6	
Isoflurane	**7.3**	ug/L	1.0	1		12/11/17 14:18		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 14:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 14:18	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 14:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 14:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 14:18	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 14:18	108-88-3	
Total Haloether	**14.5**	ug/L	1.0	1		12/11/17 14:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 14:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 14:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 14:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 14:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 14:18	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/11/17 14:18	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/11/17 14:18	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/11/17 14:18	1868-53-7	

Sample: FMW-1-20 **Lab ID: 2066562009** Collected: 12/01/17 12:25 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.1**	ug/L	4.0	1		12/11/17 14:35	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 14:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 14:35	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 14:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 14:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 14:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 14:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 14:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 14:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 14:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 14:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 14:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 14:35	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-1-20 **Lab ID: 2066562009** Collected: 12/01/17 12:25 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/11/17 14:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 14:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 14:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 14:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 14:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 14:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 406	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 421	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 427	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 428	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 508	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 528	ND	ug/L	1.0	1		12/11/17 14:35		
Halomar	ND	ug/L	1.0	1		12/11/17 14:35		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 14:35	591-78-6	
Isoflurane	**2.8**	ug/L	1.0	1		12/11/17 14:35		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 14:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 14:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 14:35	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 14:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 14:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 14:35	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 14:35	108-88-3	
Total Haloether	**2.8**	ug/L	1.0	1		12/11/17 14:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 14:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 14:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 14:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 14:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 14:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 14:35	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 14:35	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/11/17 14:35	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		12/11/17 14:35	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066562

QC Batch: 96417 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2066562001, 2066562002, 2066562003, 2066562004, 2066562005, 2066562006, 2066562007, 2066562008, 2066562009

METHOD BLANK: 414770 | Matrix: Water
Associated Lab Samples: 2066562001, 2066562002, 2066562003, 2066562004, 2066562005, 2066562006, 2066562007, 2066562008, 2066562009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/11/17 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/11/17 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/11/17 10:45	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/11/17 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	12/11/17 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	12/11/17 10:45	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/11/17 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	12/11/17 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	12/11/17 10:45	
2-Butanone (MEK)	ug/L	ND	2.0	12/11/17 10:45	
2-Hexanone	ug/L	ND	2.0	12/11/17 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/11/17 10:45	
Acetone	ug/L	ND	4.0	12/11/17 10:45	
Acrolein	ug/L	ND	8.0	12/11/17 10:45	
Acrylonitrile	ug/L	ND	4.0	12/11/17 10:45	
Benzene	ug/L	ND	1.0	12/11/17 10:45	
Bromodichloromethane	ug/L	ND	1.0	12/11/17 10:45	
Bromoform	ug/L	ND	1.0	12/11/17 10:45	
Bromomethane	ug/L	ND	1.0	12/11/17 10:45	
Carbon disulfide	ug/L	ND	1.0	12/11/17 10:45	
Carbon tetrachloride	ug/L	ND	1.0	12/11/17 10:45	
Chlorobenzene	ug/L	ND	1.0	12/11/17 10:45	
Chloroethane	ug/L	ND	1.0	12/11/17 10:45	
Chloroform	ug/L	ND	1.0	12/11/17 10:45	
Chloromethane	ug/L	ND	1.0	12/11/17 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/11/17 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/11/17 10:45	
Dibromochloromethane	ug/L	ND	1.0	12/11/17 10:45	
Dibromomethane	ug/L	ND	1.0	12/11/17 10:45	
Enflurane	ug/L	ND	1.0	12/11/17 10:45	
Ethylbenzene	ug/L	ND	1.0	12/11/17 10:45	
Haloether 229	ug/L	ND	1.0	12/11/17 10:45	
Haloether 406	ug/L	ND	1.0	12/11/17 10:45	
Haloether 421	ug/L	ND	1.0	12/11/17 10:45	
Haloether 427	ug/L	ND	1.0	12/11/17 10:45	
Haloether 428	ug/L	ND	1.0	12/11/17 10:45	
Haloether 508	ug/L	ND	1.0	12/11/17 10:45	
Haloether 528	ug/L	ND	1.0	12/11/17 10:45	
Halomar	ug/L	ND	1.0	12/11/17 10:45	
Isoflurane	ug/L	ND	1.0	12/11/17 10:45	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066562

METHOD BLANK: 414770 Matrix: Water

Associated Lab Samples: 2066562001, 2066562002, 2066562003, 2066562004, 2066562005, 2066562006, 2066562007, 2066562008, 2066562009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	12/11/17 10:45	
Methoxyflurane	ug/L	ND	1.0	12/11/17 10:45	
Methylene Chloride	ug/L	ND	5.0	12/11/17 10:45	B,C9
o-Xylene	ug/L	ND	1.0	12/11/17 10:45	
Styrene	ug/L	ND	1.0	12/11/17 10:45	
Tetrachloroethene	ug/L	ND	1.0	12/11/17 10:45	
Toluene	ug/L	ND	1.0	12/11/17 10:45	
Total Haloether	ug/L	ND	1.0	12/11/17 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/11/17 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/11/17 10:45	
Trichloroethene	ug/L	ND	1.0	12/11/17 10:45	
Trichlorofluoromethane	ug/L	ND	1.0	12/11/17 10:45	
Vinyl chloride	ug/L	ND	1.0	12/11/17 10:45	
4-Bromofluorobenzene (S)	%.	104	68-124	12/11/17 10:45	
Dibromofluoromethane (S)	%.	105	72-126	12/11/17 10:45	
Toluene-d8 (S)	%.	100	79-119	12/11/17 10:45	

LABORATORY CONTROL SAMPLE: 414771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	48.6	97	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	45.9	92	15-179	
1,1,2-Trichloroethane	ug/L	50	46.4	93	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	47.0	94	38-121	
1,1-Dichloroethane	ug/L	50	49.0	98	63-129	
1,1-Dichloroethene	ug/L	50	48.1	96	51-139	
1,2,3-Trichloropropane	ug/L	50	48.7	97	13-187	
1,2-Dichloroethane	ug/L	50	46.3	93	57-148	
1,2-Dichloropropane	ug/L	50	47.5	95	66-128	
2-Butanone (MEK)	ug/L	50	54.6	109	32-183	
2-Hexanone	ug/L	50	53.6	107	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	50.0	100	26-171	
Acetone	ug/L	50	67.8	136	22-165	
Acrolein	ug/L	50	43.9	88	10-131	
Acrylonitrile	ug/L	50	44.2	88	18-149	
Benzene	ug/L	50	48.0	96	62-131	
Bromodichloromethane	ug/L	50	49.3	99	69-132	
Bromoform	ug/L	50	47.0	94	35-166	
Bromomethane	ug/L	50	47.8	96	34-158	
Carbon disulfide	ug/L	50	46.6	93	31-128	
Carbon tetrachloride	ug/L	50	52.0	104	54-144	
Chlorobenzene	ug/L	50	51.6	103	70-127	
Chloroethane	ug/L	50	43.9	88	17-195	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066562

LABORATORY CONTROL SAMPLE: 414771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	50	51.0	102	73-134	
Chloromethane	ug/L	50	45.2	90	17-153	
cis-1,2-Dichloroethene	ug/L	50	46.9	94	68-129	
cis-1,3-Dichloropropene	ug/L	50	50.9	102	72-138	
Dibromochloromethane	ug/L	50	46.4	93	49-146	
Dibromomethane	ug/L	50	46.4	93	56-145	
Enflurane	ug/L	50	51.5	103	56-135	
Ethylbenzene	ug/L	50	50.0	100	66-126	
Haloether 229	ug/L	50	36.9	74	62-123	
Haloether 406	ug/L	50	49.7	99	62-134	
Haloether 421	ug/L	50	46.5	93	70-128	
Haloether 427	ug/L	50	49.7	99	69-153	
Haloether 428	ug/L	50	48.4	97	70-134	
Haloether 508	ug/L	50	50.8	102	52-139	
Haloether 528	ug/L	50	47.2	94	48-157	
Halomar	ug/L	50	48.3	97	62-128	
Isoflurane	ug/L	50	48.0	96	61-132	
m&p-Xylene	ug/L	100	97.5	98	65-129	
Methoxyflurane	ug/L	50	45.6	91	72-124	
Methylene Chloride	ug/L	50	46.8	94	46-168	
o-Xylene	ug/L	50	50.4	101	65-124	
Styrene	ug/L	50	52.9	106	72-133	
Tetrachloroethene	ug/L	50	54.0	108	46-157	
Toluene	ug/L	50	48.7	97	69-126	
Total Haloether	ug/L		523			
trans-1,2-Dichloroethene	ug/L	50	49.7	99	60-129	
trans-1,3-Dichloropropene	ug/L	50	50.1	100	59-149	
Trichloroethene	ug/L	50	47.6	95	67-132	
Trichlorofluoromethane	ug/L	50	47.2	94	39-171	
Vinyl chloride	ug/L	50	39.2	78	27-149	
4-Bromofluorobenzene (S)	%.			95	68-124	
Dibromofluoromethane (S)	%.			103	72-126	
Toluene-d8 (S)	%.			102	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 414772 414773

Parameter	Units	2066562004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	55.9	52.8	112	106	54-137	6	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	53.0	51.2	106	102	15-187	4	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	47.6	47.9	95	96	59-148	1	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	56.0	53.7	111	106	40-117	4	20	
1,1-Dichloroethane	ug/L	ND	50	50	56.3	54.1	113	108	59-133	4	20	
1,1-Dichloroethene	ug/L	ND	50	50	54.7	53.9	109	108	44-146	1	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	53.9	52.9	108	106	14-199	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066562

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 414772 414773

Parameter	Units	2066562004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	48.1	46.0	96	92	56-154	5	20	
1,2-Dichloropropane	ug/L	ND	50	50	51.4	48.9	103	98	62-135	5	20	
2-Butanone (MEK)	ug/L	ND	50	50	45.6	45.3	91	91	20-205	1	20	
2-Hexanone	ug/L	ND	50	50	49.7	49.9	99	100	25-189	0	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	51.7	49.8	103	100	23-184	4	20	
Acetone	ug/L	ND	50	50	50.7	49.1	94	90	11-217	3	20	
Acrolein	ug/L	ND	50	50	49.5	46.9	99	94	10-142	5	20	
Acrylonitrile	ug/L	ND	50	50	47.2	47.9	94	96	20-164	1	20	
Benzene	ug/L	ND	50	50	52.0	50.2	104	100	52-141	4	20	
Bromodichloromethane	ug/L	ND	50	50	52.1	50.1	104	100	70-134	4	20	
Bromoform	ug/L	ND	50	50	50.5	48.5	101	97	37-171	4	20	
Bromomethane	ug/L	ND	50	50	54.3	52.9	109	106	34-155	3	20	
Carbon disulfide	ug/L	ND	50	50	56.0	50.2	112	100	28-130	11	20	
Carbon tetrachloride	ug/L	ND	50	50	58.4	55.5	117	111	48-146	5	20	
Chlorobenzene	ug/L	ND	50	50	58.0	55.8	116	112	67-129	4	20	
Chloroethane	ug/L	ND	50	50	51.5	50.0	103	100	12-192	3	20	
Chloroform	ug/L	ND	50	50	56.0	52.8	111	105	66-143	6	20	
Chloromethane	ug/L	ND	50	50	53.1	50.6	106	101	14-155	5	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	53.7	49.8	106	98	56-141	7	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.0	51.7	108	103	70-139	4	20	
Dibromochloromethane	ug/L	ND	50	50	50.8	48.7	102	97	50-150	4	20	
Dibromomethane	ug/L	ND	50	50	48.7	48.9	97	98	58-153	0	20	
Enflurane	ug/L	2.3	50	50	63.2	59.8	122	115	63-126	6	20	
Ethylbenzene	ug/L	ND	50	50	56.9	55.2	114	110	57-135	3	20	
Haloether 229	ug/L	1.7	50	50	44.8	45.1	86	87	56-127	1	20	
Haloether 406	ug/L	ND	50	50	57.4	56.4	114	112	68-128	2	20	
Haloether 421	ug/L	ND	50	50	52.4	49.7	105	99	74-120	5	20	
Haloether 427	ug/L	ND	50	50	56.9	54.5	114	109	78-120	4	20	
Haloether 428	ug/L	ND	50	50	54.8	53.9	110	108	74-125	2	20	
Haloether 508	ug/L	40.0	50	50	95.8	93.3	112	107	28-156	3	20	
Haloether 528	ug/L	ND	50	50	50.9	49.3	102	99	45-142	3	20	
Halomar	ug/L	1.3	50	50	58.1	54.8	113	107	67-123	6	20	
Isoflurane	ug/L	12.7	50	50	69.5	66.6	113	108	45-140	4	20	
m&p-Xylene	ug/L	ND	100	100	112	108	112	108	56-136	3	20	
Methoxyflurane	ug/L	ND	50	50	50.2	47.7	100	95	75-119	5	20	
Methylene Chloride	ug/L	ND	50	50	50.3	48.3	101	97	45-166	4	20	
o-Xylene	ug/L	ND	50	50	56.7	54.4	113	109	57-133	4	20	
Styrene	ug/L	ND	50	50	57.0	54.5	114	109	58-144	5	20	
Tetrachloroethene	ug/L	7.5	50	50	69.5	67.7	124	120	48-143	3	20	
Toluene	ug/L	ND	50	50	53.8	51.8	108	104	59-136	4	20	
Total Haloether	ug/L	58.1			654	631				4		
trans-1,2-Dichloroethene	ug/L	ND	50	50	59.7	55.5	119	111	57-132	7	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	53.1	50.3	106	101	59-154	5	20	
Trichloroethene	ug/L	ND	50	50	52.9	51.0	104	101	58-140	4	20	
Trichlorofluoromethane	ug/L	ND	50	50	56.9	54.0	113	107	24-175	5	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066562

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 414772 414773

Parameter	Units	2066562004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	ND	50	50	49.0	45.5	98	91	21-150	7	20	
4-Bromofluorobenzene (S)	%.						102	100	68-124			
Dibromofluoromethane (S)	%.						103	103	72-126			
Toluene-d8 (S)	%.						99	99	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2066562

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
C9	Common Laboratory Contaminant.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2066562

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2066562001	**EB-20171130**	EPA 5030B/8260	96417		
2066562002	**TB-20171130**	EPA 5030B/8260	96417		
2066562003	**FB-20171130**	EPA 5030B/8260	96417		
2066562004	**FMW-3-90**	EPA 5030B/8260	96417		
2066562005	**MW-4B-3**	EPA 5030B/8260	96417		
2066562006	**EB-20171201**	EPA 5030B/8260	96417		
2066562007	**FB-20171201**	EPA 5030B/8260	96417		
2066562008	**FMW-1-90**	EPA 5030B/8260	96417		
2066562009	**FMW-1-20**	EPA 5030B/8260	96417		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Requ

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant

WO# : 2066562

2066562

1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test (Y/N): VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	EB-20171130	WT	G			11/30/17	0826		3				3					X				
2	TB-20171130	WT	G			11/30/17	LAB		2				2						X			
3	FB-20171130	WT	G			11/30/17	0919		3				3					X				
4	FMW-3-90	WT	G			11/30/17	1043		3				3					X				
5	MW-4B-3	WT	G			11/30/17	1158		3				3					X				
6	EB-20171201	WT	G			12/01/17	0845		3				3					X				
7	FB-20171201	WT	G			12/01/17	0930		3				3					X				
8	FMW-1-90	WT	G			12/01/17	1115		3				3					X				
9	FMW-1-20	WT	G			12/01/17	1225		3				3					X				
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andi Colon / Arcadis	12/1/17	1458	[signature] - Pace	12/1/17	1458	4°	Y	N	Y
				Fed Ex						
	Fed Ex	12/5/17	1115	[signature] - Pace	12/5/17	1115	3.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andi Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/1/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upo

WO# : 2066562

P **PM: CJM** **Due Date: 12/19/17**
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑ Yes ☐ No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12/8/17 MB

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐ Yes	☐ No	☑ N/A	1	
Chain of Custody Present:	☑ Yes	☐ No	☐ N/A	2	
Chain of Custody Complete:	☑ Yes	☐ No	☐ N/A	3	
Chain of Custody Relinquished:	☑ Yes	☐ No	☐ N/A	4	
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	5	
Samples Arrived within Hold Time:	☑ Yes	☐ No	☐ N/A	6	
Sufficient Volume:	☑ Yes	☐ No	☐ N/A	7	
Correct Containers Used:	☑ Yes	☐ No	☐ N/A	8	
Filtered vol. Rec. for Diss. tests	☐ Yes	☐ No	☑ N/A	9	
Sample Labels match COC:	☑ Yes	☐ No	☐ N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑ Yes	☐ No	☐ N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐ Yes	☐ No	☑ N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐ Yes	☐ No	☑ N/A	13	If No, was preserative added? ☐ Yes ☐ No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	14	
Trip Blank Present:	☑ Yes	☐ No		15	2 voa vials >6mm

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 2066645

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(504)469-0333

December 18, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2066645

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2066645

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2066645

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2066645001	**TB-20171204**	Water	12/04/17 00:00	12/08/17 10:30
2066645002	**EB-20171204**	Water	12/04/17 08:05	12/08/17 10:30
2066645003	**FB-20171204**	Water	12/04/17 10:08	12/08/17 10:30
2066645004	**MW-1A-3-BP**	Water	12/04/17 11:10	12/08/17 10:30
2066645005	**MW-1D-3-BP**	Water	12/04/17 13:29	12/08/17 10:30
2066645006	**EB-20171205**	Water	12/05/17 08:58	12/08/17 10:30
2066645007	**FB-20171205**	Water	12/05/17 09:54	12/08/17 10:30
2066645008	**MW-4B-2**	Water	12/05/17 10:45	12/08/17 10:30
2066645009	**MW-4B-4**	Water	12/05/17 11:35	12/08/17 10:30
2066645010	**MW-1**	Water	12/05/17 12:40	12/08/17 10:30
2066645011	**MW-3A-4**	Water	12/05/17 13:31	12/08/17 10:30
2066645012	**EB-20171206**	Water	12/06/17 08:30	12/08/17 10:30
2066645013	**MW-1D-3**	Water	12/06/17 11:30	12/08/17 10:30
2066645014	**FB-20171206**	Water	12/06/17 12:34	12/08/17 10:30
2066645015	**MW-9-90**	Water	12/06/17 13:15	12/08/17 10:30

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2066645

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2066645001	**TB-20171204**	EPA 5030B/8260	GEM	56	PASI-N
2066645002	**EB-20171204**	EPA 5030B/8260	GEM	56	PASI-N
2066645003	**FB-20171204**	EPA 5030B/8260	GEM	56	PASI-N
2066645004	**MW-1A-3-BP**	EPA 5030B/8260	GEM	56	PASI-N
2066645005	**MW-1D-3-BP**	EPA 5030B/8260	GEM	56	PASI-N
2066645006	**EB-20171205**	EPA 5030B/8260	GEM	56	PASI-N
2066645007	**FB-20171205**	EPA 5030B/8260	GEM	56	PASI-N
2066645008	**MW-4B-2**	EPA 5030B/8260	GEM	56	PASI-N
2066645009	**MW-4B-4**	EPA 5030B/8260	GEM	56	PASI-N
2066645010	**MW-1**	EPA 5030B/8260	GEM	56	PASI-N
2066645011	**MW-3A-4**	EPA 5030B/8260	GEM	56	PASI-N
2066645012	**EB-20171206**	EPA 5030B/8260	GEM	56	PASI-N
2066645013	**MW-1D-3**	EPA 5030B/8260	GEM	56	PASI-N
2066645014	**FB-20171206**	EPA 5030B/8260	GEM	56	PASI-N
2066645015	**MW-9-90**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2066645

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 18, 2017

General Information:
15 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 96489

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2066643003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 415096)
  - Haloether 427

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: TB-20171204 **Lab ID: 2066645001** Collected: 12/04/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:54	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 12:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 508	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:54		
Halomar	ND	ug/L	1.0	1		12/12/17 12:54		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:54	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 12:54		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:54	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 12:54	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:54	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 12:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: TB-20171204 **Lab ID: 2066645001** Collected: 12/04/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:54	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/12/17 12:54	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 12:54	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		12/12/17 12:54	1868-53-7	

Sample: EB-20171204 **Lab ID: 2066645002** Collected: 12/04/17 08:05 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.0**	ug/L	4.0	1		12/12/17 13:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 13:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 13:11	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 13:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 13:11	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 13:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 13:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 13:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 13:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 13:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 13:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 13:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 13:11	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 13:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 13:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 13:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 13:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 13:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 13:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 406	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 421	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 427	ND	ug/L	1.0	1		12/12/17 13:11		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: EB-20171204 **Lab ID: 2066645002** Collected: 12/04/17 08:05 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 508	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 528	ND	ug/L	1.0	1		12/12/17 13:11		
Halomar	ND	ug/L	1.0	1		12/12/17 13:11		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 13:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 13:11		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 13:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 13:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 13:11	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 13:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 13:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 13:11	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 13:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 13:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 13:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 13:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 13:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 13:11	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 13:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 13:11	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/12/17 13:11	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/12/17 13:11	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 13:11	1868-53-7	

Sample: FB-20171204 **Lab ID: 2066645003** Collected: 12/04/17 10:08 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.5**	ug/L	4.0	1		12/12/17 13:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 13:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 13:29	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 13:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 13:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 13:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 13:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 13:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 13:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 13:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 13:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 13:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 13:29	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171204 **Lab ID: 2066645003** Collected: 12/04/17 10:08 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 13:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 13:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 13:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 13:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:29	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 13:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 13:29	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 406	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 421	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 427	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 428	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 508	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 528	ND	ug/L	1.0	1		12/12/17 13:29		
Halomar	ND	ug/L	1.0	1		12/12/17 13:29		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 13:29	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 13:29		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 13:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 13:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 13:29	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 13:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 13:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 13:29	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 13:29	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 13:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 13:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 13:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 13:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 13:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 13:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 13:29	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 13:29	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/12/17 13:29	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 13:29	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1A-3-BP **Lab ID: 2066645004** Collected: 12/04/17 11:10 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 13:47	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 13:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 13:47	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 13:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 13:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 13:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 13:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 13:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 13:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 13:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 13:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 13:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 13:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 13:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 13:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 13:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 13:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:47	10061-02-6	
Enflurane	**1.9**	ug/L	1.0	1		12/12/17 13:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 13:47	100-41-4	
Haloether 229	**4.3**	ug/L	1.0	1		12/12/17 13:47		
Haloether 406	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 421	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 427	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 428	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 508	**54.7**	ug/L	1.0	1		12/12/17 13:47		
Haloether 528	**1.3**	ug/L	1.0	1		12/12/17 13:47		
Halomar	**1.0**	ug/L	1.0	1		12/12/17 13:47		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 13:47	591-78-6	
Isoflurane	**19.3**	ug/L	1.0	1		12/12/17 13:47		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 13:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 13:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 13:47	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 13:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 13:47	79-34-5	
Tetrachloroethene	**1.8**	ug/L	1.0	1		12/12/17 13:47	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 13:47	108-88-3	
Total Haloether	**82.5**	ug/L	1.0	1		12/12/17 13:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1A-3-BP **Lab ID: 2066645004** Collected: 12/04/17 11:10 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 13:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 13:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 13:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 13:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 13:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 13:47	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 13:47	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/12/17 13:47	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 13:47	1868-53-7	

Sample: MW-1D-3-BP **Lab ID: 2066645005** Collected: 12/04/17 13:29 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 14:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:05	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 14:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 14:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 406	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:05		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1D-3-BP **Lab ID: 2066645005** Collected: 12/04/17 13:29 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 508	**127**	ug/L	1.0	1		12/12/17 14:05		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:05		
Halomar	ND	ug/L	1.0	1		12/12/17 14:05		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:05	591-78-6	
Isoflurane	**7.2**	ug/L	1.0	1		12/12/17 14:05		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 14:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:05	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:05	79-34-5	
Tetrachloroethene	**4.5**	ug/L	1.0	1		12/12/17 14:05	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:05	108-88-3	
Total Haloether	**134**	ug/L	1.0	1		12/12/17 14:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 14:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:05	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 14:05	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 14:05	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 14:05	1868-53-7	

Sample: EB-20171205 **Lab ID: 2066645006** Collected: 12/05/17 08:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 14:23	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:23	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:23	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:23	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:23	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:23	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:23	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:23	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 14:23	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: EB-20171205 **Lab ID: 2066645006** Collected: 12/05/17 08:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:23	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:23	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:23	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 14:23	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:23	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 406	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 508	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:23		
Halomar	ND	ug/L	1.0	1		12/12/17 14:23		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:23	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 14:23		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 14:23	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:23	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 14:23	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:23	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 14:23		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:23	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 14:23	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:23	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:23	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:23	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 14:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/12/17 14:23	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 14:23	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171205 **Lab ID: 2066645007** Collected: 12/05/17 09:54 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.1**	ug/L	4.0	1		12/12/17 14:41	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:41	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:41	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:41	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:41	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:41	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:41	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 14:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:41	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:41	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:41	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 14:41	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:41	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 406	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 508	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:41		
Halomar	ND	ug/L	1.0	1		12/12/17 14:41		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:41	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 14:41		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 14:41	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:41	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 14:41	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:41	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 14:41		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171205 **Lab ID: 2066645007** Collected: 12/05/17 09:54 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:41	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 14:41	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:41	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:41	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 14:41	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 14:41	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 14:41	1868-53-7	

Sample: MW-4B-2 **Lab ID: 2066645008** Collected: 12/05/17 10:45 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 14:58	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:58	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:58	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:58	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:58	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:58	75-00-3	
Chloroform	**1.2**	ug/L	1.0	1		12/12/17 14:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:58	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:58	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:58	10061-02-6	
Enflurane	**5.8**	ug/L	1.0	1		12/12/17 14:58	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:58	100-41-4	
Haloether 229	**7.6**	ug/L	1.0	1		12/12/17 14:58		
Haloether 406	**1.3**	ug/L	1.0	1		12/12/17 14:58		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:58		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:58		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-4B-2 **Lab ID: 2066645008** Collected: 12/05/17 10:45 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:58		
Haloether 508	**28.1**	ug/L	1.0	1		12/12/17 14:58		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:58		
Halomar	**6.0**	ug/L	1.0	1		12/12/17 14:58		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:58	591-78-6	
Isoflurane	**155**	ug/L	1.0	1		12/12/17 14:58		
Methoxyflurane	**1.7**	ug/L	1.0	1		12/12/17 14:58	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:58	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:58	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	1		12/12/17 14:58	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:58	108-88-3	
Total Haloether	**205**	ug/L	1.0	1		12/12/17 14:58		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	**1.6**	ug/L	1.0	1		12/12/17 14:58	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:58	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:58	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/12/17 14:58	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/12/17 14:58	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 14:58	1868-53-7	

Sample: MW-4B-4 **Lab ID: 2066645009** Collected: 12/05/17 11:35 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.6**	ug/L	4.0	1		12/12/17 15:16	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 15:16	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 15:16	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 15:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 15:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 15:16	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 15:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 15:16	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 15:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 15:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 15:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 15:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 15:16	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-4B-4 **Lab ID: 2066645009** Collected: 12/05/17 11:35 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 15:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 15:16	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 15:16	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 15:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:16	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 15:16	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 15:16	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 406	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 421	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 427	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 428	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 508	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 528	ND	ug/L	1.0	1		12/12/17 15:16		
Halomar	ND	ug/L	1.0	1		12/12/17 15:16		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 15:16	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 15:16		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 15:16	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 15:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 15:16	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 15:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 15:16	79-34-5	
Tetrachloroethene	**1.4**	ug/L	1.0	1		12/12/17 15:16	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 15:16	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 15:16		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 15:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 15:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 15:16	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 15:16	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 15:16	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 15:16	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 15:16	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 15:16	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/12/17 15:16	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1 **Lab ID: 2066645010** Collected: 12/05/17 12:40 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.4**	ug/L	4.0	1		12/12/17 15:34	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 15:34	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 15:34	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 15:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 15:34	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 15:34	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 15:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 15:34	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 15:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 15:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 15:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 15:34	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 15:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 15:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 15:34	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 15:34	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 15:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:34	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 15:34	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 15:34	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 406	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 421	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 427	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 428	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 508	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 528	ND	ug/L	1.0	1		12/12/17 15:34		
Halomar	ND	ug/L	1.0	1		12/12/17 15:34		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 15:34	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 15:34		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 15:34	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 15:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 15:34	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 15:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 15:34	79-34-5	
Tetrachloroethene	**2.2**	ug/L	1.0	1		12/12/17 15:34	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 15:34	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 15:34		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1 **Lab ID: 2066645010** Collected: 12/05/17 12:40 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 15:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 15:34	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 15:34	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 15:34	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 15:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 15:34	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 15:34	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 15:34	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/12/17 15:34	1868-53-7	

Sample: MW-3A-4 **Lab ID: 2066645011** Collected: 12/05/17 13:31 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.9**	ug/L	4.0	1		12/12/17 15:52	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 15:52	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 15:52	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 15:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 15:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 15:52	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 15:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 15:52	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 15:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 15:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 15:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 15:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 15:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 15:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 15:52	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 15:52	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 15:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:52	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 15:52	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 15:52	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 406	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 421	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 427	ND	ug/L	1.0	1		12/12/17 15:52		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-3A-4 **Lab ID: 2066645011** Collected: 12/05/17 13:31 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 508	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 528	ND	ug/L	1.0	1		12/12/17 15:52		
Halomar	ND	ug/L	1.0	1		12/12/17 15:52		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 15:52	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 15:52		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 15:52	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 15:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 15:52	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 15:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 15:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 15:52	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 15:52	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 15:52		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 15:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 15:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 15:52	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 15:52	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 15:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 15:52	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 15:52	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/12/17 15:52	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 15:52	1868-53-7	

Sample: EB-20171206 **Lab ID: 2066645012** Collected: 12/06/17 08:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.3**	ug/L	4.0	1		12/12/17 16:09	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 16:09	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 16:09	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 16:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 16:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 16:09	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 16:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 16:09	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 16:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 16:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 16:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 16:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 16:09	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: EB-20171206 **Lab ID: 2066645012** Collected: 12/06/17 08:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 16:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 16:09	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 16:09	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 16:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:09	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 16:09	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 16:09	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 406	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 421	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 427	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 428	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 508	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 528	ND	ug/L	1.0	1		12/12/17 16:09		
Halomar	ND	ug/L	1.0	1		12/12/17 16:09		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 16:09	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 16:09		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 16:09	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 16:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 16:09	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 16:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 16:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 16:09	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 16:09	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 16:09		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 16:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 16:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 16:09	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 16:09	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 16:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 16:09	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 16:09	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 16:09	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 16:09	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1D-3 **Lab ID: 2066645013** Collected: 12/06/17 11:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.9**	ug/L	4.0	1		12/12/17 16:27	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 16:27	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 16:27	107-13-1	
Benzene	**1.2**	ug/L	1.0	1		12/12/17 16:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 16:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 16:27	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 16:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 16:27	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 16:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 16:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 16:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 16:27	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 16:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 16:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 16:27	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 16:27	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 16:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:27	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 16:27	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 16:27	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 406	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 421	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 427	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 428	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 508	**25.6**	ug/L	1.0	1		12/12/17 16:27		
Haloether 528	ND	ug/L	1.0	1		12/12/17 16:27		
Halomar	ND	ug/L	1.0	1		12/12/17 16:27		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 16:27	591-78-6	
Isoflurane	**29.7**	ug/L	1.0	1		12/12/17 16:27		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 16:27	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 16:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 16:27	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 16:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 16:27	79-34-5	
Tetrachloroethene	**3.7**	ug/L	1.0	1		12/12/17 16:27	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 16:27	108-88-3	
Total Haloether	**55.2**	ug/L	1.0	1		12/12/17 16:27		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1D-3 **Lab ID: 2066645013** Collected: 12/06/17 11:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 16:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 16:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 16:27	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 16:27	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 16:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 16:27	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 16:27	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 16:27	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/12/17 16:27	1868-53-7	

Sample: FB-20171206 **Lab ID: 2066645014** Collected: 12/06/17 12:34 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		12/12/17 16:45	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 16:45	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 16:45	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 16:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 16:45	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 16:45	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 16:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 16:45	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 16:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 16:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 16:45	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 16:45	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 16:45	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 16:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 16:45	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 16:45	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 16:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:45	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 16:45	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 16:45	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 406	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 421	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 427	ND	ug/L	1.0	1		12/12/17 16:45		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171206 **Lab ID: 2066645014** Collected: 12/06/17 12:34 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 508	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 528	ND	ug/L	1.0	1		12/12/17 16:45		
Halomar	ND	ug/L	1.0	1		12/12/17 16:45		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 16:45	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 16:45		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 16:45	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 16:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 16:45	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 16:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 16:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 16:45	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 16:45	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 16:45		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 16:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 16:45	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 16:45	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 16:45	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 16:45	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 16:45	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 16:45	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 16:45	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 16:45	1868-53-7	

Sample: MW-9-90 **Lab ID: 2066645015** Collected: 12/06/17 13:15 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 17:03	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 17:03	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 17:03	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 17:03	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 17:03	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 17:03	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 17:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 17:03	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 17:03	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 17:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 17:03	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 17:03	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 17:03	67-66-3	

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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-9-90 **Lab ID: 2066645015** Collected: 12/06/17 13:15 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 17:03	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 17:03	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 17:03	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 17:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 17:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 17:03	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 17:03	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 17:03	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 406	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 421	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 427	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 428	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 508	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 528	ND	ug/L	1.0	1		12/12/17 17:03		
Halomar	ND	ug/L	1.0	1		12/12/17 17:03		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 17:03	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 17:03		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 17:03	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 17:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 17:03	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 17:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 17:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 17:03	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 17:03	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 17:03		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 17:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 17:03	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 17:03	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 17:03	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 17:03	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 17:03	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/12/17 17:03	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/12/17 17:03	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 17:03	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066645

QC Batch: 96489 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2066645001, 2066645002, 2066645003, 2066645004, 2066645005, 2066645006, 2066645007, 2066645008, 2066645009, 2066645010, 2066645011, 2066645012, 2066645013, 2066645014, 2066645015

METHOD BLANK: 415094 | Matrix: Water
Associated Lab Samples: 2066645001, 2066645002, 2066645003, 2066645004, 2066645005, 2066645006, 2066645007, 2066645008, 2066645009, 2066645010, 2066645011, 2066645012, 2066645013, 2066645014, 2066645015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1-Dichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,1-Dichloroethene	ug/L	ND	1.0	12/12/17 10:15	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/12/17 10:15	
1,2-Dichloroethane	ug/L	ND	1.0	12/12/17 10:15	
1,2-Dichloropropane	ug/L	ND	1.0	12/12/17 10:15	
2-Butanone (MEK)	ug/L	ND	2.0	12/12/17 10:15	
2-Hexanone	ug/L	ND	2.0	12/12/17 10:15	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/12/17 10:15	
Acetone	ug/L	ND	4.0	12/12/17 10:15	
Acrolein	ug/L	ND	8.0	12/12/17 10:15	
Acrylonitrile	ug/L	ND	4.0	12/12/17 10:15	
Benzene	ug/L	ND	1.0	12/12/17 10:15	
Bromodichloromethane	ug/L	ND	1.0	12/12/17 10:15	
Bromoform	ug/L	ND	1.0	12/12/17 10:15	
Bromomethane	ug/L	ND	1.0	12/12/17 10:15	
Carbon disulfide	ug/L	ND	1.0	12/12/17 10:15	
Carbon tetrachloride	ug/L	ND	1.0	12/12/17 10:15	
Chlorobenzene	ug/L	ND	1.0	12/12/17 10:15	
Chloroethane	ug/L	ND	1.0	12/12/17 10:15	
Chloroform	ug/L	ND	1.0	12/12/17 10:15	
Chloromethane	ug/L	ND	1.0	12/12/17 10:15	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/12/17 10:15	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/12/17 10:15	
Dibromochloromethane	ug/L	ND	1.0	12/12/17 10:15	
Dibromomethane	ug/L	ND	1.0	12/12/17 10:15	
Enflurane	ug/L	ND	1.0	12/12/17 10:15	
Ethylbenzene	ug/L	ND	1.0	12/12/17 10:15	
Haloether 229	ug/L	ND	1.0	12/12/17 10:15	
Haloether 406	ug/L	ND	1.0	12/12/17 10:15	
Haloether 421	ug/L	ND	1.0	12/12/17 10:15	
Haloether 427	ug/L	ND	1.0	12/12/17 10:15	
Haloether 428	ug/L	ND	1.0	12/12/17 10:15	
Haloether 508	ug/L	ND	1.0	12/12/17 10:15	
Haloether 528	ug/L	ND	1.0	12/12/17 10:15	
Halomar	ug/L	ND	1.0	12/12/17 10:15	
Isoflurane	ug/L	ND	1.0	12/12/17 10:15	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066645

METHOD BLANK: 415094 Matrix: Water

Associated Lab Samples: 2066645001, 2066645002, 2066645003, 2066645004, 2066645005, 2066645006, 2066645007, 2066645008, 2066645009, 2066645010, 2066645011, 2066645012, 2066645013, 2066645014, 2066645015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	12/12/17 10:15	
Methoxyflurane	ug/L	ND	1.0	12/12/17 10:15	
Methylene Chloride	ug/L	ND	5.0	12/12/17 10:15	
o-Xylene	ug/L	ND	1.0	12/12/17 10:15	
Styrene	ug/L	ND	1.0	12/12/17 10:15	
Tetrachloroethene	ug/L	ND	1.0	12/12/17 10:15	
Toluene	ug/L	ND	1.0	12/12/17 10:15	
Total Haloether	ug/L	ND	1.0	12/12/17 10:15	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/12/17 10:15	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/12/17 10:15	
Trichloroethene	ug/L	ND	1.0	12/12/17 10:15	
Trichlorofluoromethane	ug/L	ND	1.0	12/12/17 10:15	
Vinyl chloride	ug/L	ND	1.0	12/12/17 10:15	
4-Bromofluorobenzene (S)	%.	103	68-124	12/12/17 10:15	
Dibromofluoromethane (S)	%.	99	72-126	12/12/17 10:15	
Toluene-d8 (S)	%.	100	79-119	12/12/17 10:15	

LABORATORY CONTROL SAMPLE: 415095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	45.5	91	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	47.4	95	15-179	
1,1,2-Trichloroethane	ug/L	50	43.3	87	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	43.7	87	38-121	
1,1-Dichloroethane	ug/L	50	47.1	94	63-129	
1,1-Dichloroethene	ug/L	50	43.9	88	51-139	
1,2,3-Trichloropropane	ug/L	50	49.3	99	13-187	
1,2-Dichloroethane	ug/L	50	44.3	89	57-148	
1,2-Dichloropropane	ug/L	50	44.5	89	66-128	
2-Butanone (MEK)	ug/L	50	43.5	87	32-183	
2-Hexanone	ug/L	50	46.5	93	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	47.5	95	26-171	
Acetone	ug/L	50	52.3	105	22-165	
Acrolein	ug/L	50	39.1	78	10-131	
Acrylonitrile	ug/L	50	41.0	82	18-149	
Benzene	ug/L	50	44.9	90	62-131	
Bromodichloromethane	ug/L	50	46.2	92	69-132	
Bromoform	ug/L	50	42.6	85	35-166	
Bromomethane	ug/L	50	45.6	91	34-158	
Carbon disulfide	ug/L	50	42.1	84	31-128	
Carbon tetrachloride	ug/L	50	48.4	97	54-144	
Chlorobenzene	ug/L	50	51.2	102	70-127	
Chloroethane	ug/L	50	41.1	82	17-195	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066645

LABORATORY CONTROL SAMPLE: 415095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	50	46.8	94	73-134	
Chloromethane	ug/L	50	41.0	82	17-153	
cis-1,2-Dichloroethene	ug/L	50	43.8	88	68-129	
cis-1,3-Dichloropropene	ug/L	50	46.8	94	72-138	
Dibromochloromethane	ug/L	50	44.1	88	49-146	
Dibromomethane	ug/L	50	44.4	89	56-145	
Enflurane	ug/L	50	49.2	98	56-135	
Ethylbenzene	ug/L	50	49.6	99	66-126	
Haloether 229	ug/L	50	37.0	74	62-123	
Haloether 406	ug/L	50	45.8	92	62-134	
Haloether 421	ug/L	50	45.6	91	70-128	
Haloether 427	ug/L	50	48.8	98	69-153	
Haloether 428	ug/L	50	46.1	92	70-134	
Haloether 508	ug/L	50	46.4	93	52-139	
Haloether 528	ug/L	50	46.6	93	48-157	
Halomar	ug/L	50	45.7	91	62-128	
Isoflurane	ug/L	50	46.4	93	61-132	
m&p-Xylene	ug/L	100	95.4	95	65-129	
Methoxyflurane	ug/L	50	43.5	87	72-124	
Methylene Chloride	ug/L	50	44.0	88	46-168	
o-Xylene	ug/L	50	49.4	99	65-124	
Styrene	ug/L	50	49.9	100	72-133	
Tetrachloroethene	ug/L	50	54.5	109	46-157	
Toluene	ug/L	50	46.4	93	69-126	
Total Haloether	ug/L		501			
trans-1,2-Dichloroethene	ug/L	50	45.5	91	60-129	
trans-1,3-Dichloropropene	ug/L	50	45.5	91	59-149	
Trichloroethene	ug/L	50	46.4	93	67-132	
Trichlorofluoromethane	ug/L	50	44.6	89	39-171	
Vinyl chloride	ug/L	50	37.3	75	27-149	
4-Bromofluorobenzene (S)	%.			100	68-124	
Dibromofluoromethane (S)	%.			95	72-126	
Toluene-d8 (S)	%.			96	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415096 415097

Parameter	Units	2066643003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	55.1	47.9	110	96	54-137	14	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	52.9	48.4	106	97	15-187	9	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	48.2	45.3	96	91	59-148	6	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	53.1	46.0	106	92	40-117	14	20	
1,1-Dichloroethane	ug/L	ND	50	50	54.9	48.5	110	97	59-133	12	20	
1,1-Dichloroethene	ug/L	ND	50	50	53.8	46.9	108	94	44-146	14	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	53.1	47.7	106	95	14-199	11	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066645

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415096 415097

Parameter	Units	2066643003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	50.1	45.2	100	90	56-154	10	20	
1,2-Dichloropropane	ug/L	ND	50	50	53.0	47.5	106	95	62-135	11	20	
2-Butanone (MEK)	ug/L	ND	50	50	43.5	40.2	87	80	20-205	8	20	
2-Hexanone	ug/L	ND	50	50	48.9	46.4	98	93	25-189	5	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	49.7	47.6	99	95	23-184	4	20	
Acetone	ug/L	ND	50	50	44.5	42.6	85	81	11-217	5	20	
Acrolein	ug/L	ND	50	50	42.0	40.1	84	80	10-142	5	20	
Acrylonitrile	ug/L	ND	50	50	45.1	42.4	90	85	20-164	6	20	
Benzene	ug/L	ND	50	50	52.1	46.3	104	93	52-141	12	20	
Bromodichloromethane	ug/L	ND	50	50	52.0	47.1	104	94	70-134	10	20	
Bromoform	ug/L	ND	50	50	46.3	41.7	93	83	37-171	10	20	
Bromomethane	ug/L	ND	50	50	55.1	48.6	110	97	34-155	12	20	
Carbon disulfide	ug/L	ND	50	50	53.2	44.3	106	89	28-130	18	20	
Carbon tetrachloride	ug/L	ND	50	50	59.2	52.1	118	104	48-146	13	20	
Chlorobenzene	ug/L	ND	50	50	57.7	51.7	115	103	67-129	11	20	
Chloroethane	ug/L	ND	50	50	52.4	44.4	105	89	12-192	17	20	
Chloroform	ug/L	ND	50	50	54.5	48.0	109	96	66-143	13	20	
Chloromethane	ug/L	ND	50	50	49.1	42.0	98	84	14-155	16	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	51.5	44.1	103	88	56-141	16	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.3	47.8	109	96	70-139	13	20	
Dibromochloromethane	ug/L	ND	50	50	47.6	43.1	95	86	50-150	10	20	
Dibromomethane	ug/L	ND	50	50	50.2	45.3	100	91	58-153	10	20	
Enflurane	ug/L	ND	50	50	59.7	51.4	119	103	63-126	15	20	
Ethylbenzene	ug/L	ND	50	50	56.0	50.0	112	100	57-135	11	20	
Haloether 229	ug/L	ND	50	50	46.1	41.1	92	82	56-127	12	20	
Haloether 406	ug/L	ND	50	50	57.8	50.2	116	100	68-128	14	20	
Haloether 421	ug/L	ND	50	50	53.8	47.3	108	95	74-120	13	20	
Haloether 427	ug/L	ND	50	50	60.4	54.4	121	109	78-120	11	20	M1
Haloether 428	ug/L	ND	50	50	56.0	50.9	112	102	74-125	10	20	
Haloether 508	ug/L	ND	50	50	57.2	48.0	114	96	28-156	18	20	
Haloether 528	ug/L	ND	50	50	55.3	48.9	111	98	45-142	12	20	
Halomar	ug/L	ND	50	50	55.1	47.9	110	96	67-123	14	20	
Isoflurane	ug/L	ND	50	50	57.8	50.8	116	102	45-140	13	20	
m&p-Xylene	ug/L	ND	100	100	110	99.2	110	99	56-136	10	20	
Methoxyflurane	ug/L	ND	50	50	50.6	45.5	101	91	75-119	11	20	
Methylene Chloride	ug/L	ND	50	50	49.6	42.5	99	85	45-166	15	20	
o-Xylene	ug/L	ND	50	50	54.3	49.9	109	100	57-133	9	20	
Styrene	ug/L	ND	50	50	56.1	51.0	112	102	58-144	10	20	
Tetrachloroethene	ug/L	ND	50	50	61.7	56.9	123	114	48-143	8	20	
Toluene	ug/L	ND	50	50	54.2	47.6	108	95	59-136	13	20	
Total Haloether	ug/L	ND			610	536				13		
trans-1,2-Dichloroethene	ug/L	ND	50	50	56.6	48.3	113	97	57-132	16	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	52.1	47.1	104	94	59-154	10	20	
Trichloroethene	ug/L	ND	50	50	54.8	49.2	110	98	58-140	11	20	
Trichlorofluoromethane	ug/L	ND	50	50	54.7	47.8	109	96	24-175	14	20	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066645

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 415096 415097

Parameter	Units	2066643003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	ND	50	50	44.4	38.0	89	76	21-150	16	20	
4-Bromofluorobenzene (S)	%.						103	104	68-124			
Dibromofluoromethane (S)	%.						99	96	72-126			
Toluene-d8 (S)	%.						98	97	79-119			

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2066645

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2066645

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2066645001	**TB-20171204**	EPA 5030B/8260	96489		
2066645002	**EB-20171204**	EPA 5030B/8260	96489		
2066645003	**FB-20171204**	EPA 5030B/8260	96489		
2066645004	**MW-1A-3-BP**	EPA 5030B/8260	96489		
2066645005	**MW-1D-3-BP**	EPA 5030B/8260	96489		
2066645006	**EB-20171205**	EPA 5030B/8260	96489		
2066645007	**FB-20171205**	EPA 5030B/8260	96489		
2066645008	**MW-4B-2**	EPA 5030B/8260	96489		
2066645009	**MW-4B-4**	EPA 5030B/8260	96489		
2066645010	**MW-1**	EPA 5030B/8260	96489		
2066645011	**MW-3A-4**	EPA 5030B/8260	96489		
2066645012	**EB-20171206**	EPA 5030B/8260	96489		
2066645013	**MW-1D-3**	EPA 5030B/8260	96489		
2066645014	**FB-20171206**	EPA 5030B/8260	96489		
2066645015	**MW-9-90**	EPA 5030B/8260	96489		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields mus

WO# : 2066645

2066645

Section A
Required Client Information:

Company: Arcadis
Address: #48 City View Plaza 1 Suite 401
Rd 165 KM 1.2, Guaynabo, PR 00968
Email:
Phone: Fax:
Requested Due Date:

Section B
Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order #:
Project Name: Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:

Section C
Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: craig.mccollum@pacelabs.com,
Pace Profile #: 1037 L12

Regulatory Agency:
State / Location: PR

Requested Analyses Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N) VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171204	WT	G			12/4/17	LAB		2				2						X			
2	EB-20171204	WT	G			12/4/17	0805		3				3					X				
3	FB-20171204	WT	G			12/4/17	1008		3				3					X				
4	MW-1A-3-BP	WT	G			12/4/17	1110		3				3					X				
5	MW-1D-3-BP	WT	G			12/4/17	1329		3				3					X				
6	EB-20171205	WT	G			12/5/17	0858		3				3					X				
7	FB-20171205	WT	G			12/5/17	0951		3				3					X				
8	MW-4B-2	WT	G			12/5/17	1045		3				3					X				
9	MW-4B-4	WT	G			12/5/17	1135		3				3					X				
10	MW-1	WT	G			12/5/17	1240		3				3					X				
11	MW-3A-4	WT	G			12/5/17	1331		3				3					X				
12	EB-20171206	WT	G			12/6/17	0830		3				3					X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Level IV	Andrew Colom / Arcadis	12/6/17	1505	[illegible signature]	12/6/17	1505	4°C / Y / N / Y
	Fed Ex	12/8/17	1030	Fed Ex [illegible signature]	12/8/17	1030	3.1 / Y / N / Y

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew Colom

SIGNATURE of SAMPLER: [illegible signature]

DATE Signed: 12/6/17

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	MW-1D-3	WT	G			12/6/17	1130		3				3						X				
2	FB-20171206	WT	G			12/6/17	1234		3				3						X				
3	MW-9-90	WT	G			12/6/17	1315		3				3						X				
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV	Arcadis	12/6/17	1505	Pace	12/6/17	1505				
		12/6/17	Nico	FedEx						
	FedEx	12/8/17	1030	Pace	12/8/17	1030	3.1	Y	Y	Y

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colon

SIGNATURE of SAMPLER:

DATE Signed: 12/6/17

WO#: 2066645

PM: CJM Due Date: 12/22/17
CLIENT: 20-CHEV-ARC

Pace Analytical

Sample Condition Upon

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Project #: 20

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12/8/17 JMB

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☐No	☑N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017

Instrument ID: 20MSVD

LAB SAMPLE ID	SAMPLE NAME	BFB	DIBF	TOL8
415094	415094BLANK	103	99	100
415095	415095LCS	100	95	96
2066645001	TB-20171204	105	103	98
2066645002	EB-20171204	101	99	101
2066645003	FB-20171204	100	100	99
2066645004	MW-1A-3-BP	103	100	100
2066645005	MW-1D-3-BP	104	100	99
2066645006	EB-20171205	101	100	99
2066645007	FB-20171205	104	101	99
2066645008	MW-4B-2	101	100	101
2066645009	MW-4B-4	104	102	100
2066645010	MW-1	104	98	100
2066645011	MW-3A-4	103	101	99
2066645012	EB-20171206	104	99	99
2066645013	MW-1D-3	104	98	99
2066645014	FB-20171206	105	101	100
2066645015	MW-9-90	103	99	101

	QC LIMITS
(BFB) = 4-Bromofluorobenzene (S)	(68-124)
(DIBF) = Dibromofluoromethane (S)	(72-126)
(TOL8) = Toluene-d8 (S)	(79-119)

* Values outside of QC Limits

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New Orleans

Lab Sample ID: 415095LCS

Date Extracted: 12/12/2017

Date Analyzed (1): 12/12/2017

Instrument: 20MSVD

LCS Lot No: 54695

Lab File ID: 121217.B\1212D07.D

SDG No.: 2066645

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	50.0	52.3	105	22-165
Acrolein	50.0	39.1	78	10-131
Acrylonitrile	50.0	41.0	82	18-149
Benzene	50.0	44.9	90	62-131
Bromodichloromethane	50.0	46.2	92	69-132
Bromoform	50.0	42.6	85	35-166
Bromomethane	50.0	45.6	91	34-158
2-Butanone (MEK)	50.0	43.5	87	32-183
Carbon disulfide	50.0	42.1	84	31-128
Carbon tetrachloride	50.0	48.4	97	54-144
Chlorobenzene	50.0	51.2	102	70-127
Chloroethane	50.0	41.1	82	17-195
Chloroform	50.0	46.8	94	73-134
Chloromethane	50.0	41.0	82	17-153
Dibromochloromethane	50.0	44.1	88	49-146
Dibromomethane	50.0	44.4	89	56-145
1,1-Dichloroethane	50.0	47.1	94	63-129
1,2-Dichloroethane	50.0	44.3	89	57-148
1,1-Dichloroethene	50.0	43.9	88	51-139
cis-1,2-Dichloroethene	50.0	43.8	88	68-129
trans-1,2-Dichloroethene	50.0	45.5	91	60-129
1,2-Dichloropropane	50.0	44.5	89	66-128
cis-1,3-Dichloropropene	50.0	46.8	94	72-138
trans-1,3-Dichloropropene	50.0	45.5	91	59-149
Enflurane	50.0	49.2	98	56-135
Ethylbenzene	50.0	49.6	99	66-126
Haloether 229	50.0	37.0	74	62-123
Haloether 406	50.0	45.8	92	62-134
Haloether 421	50.0	45.6	91	70-128
Haloether 427	50.0	48.8	98	69-153
Haloether 428	50.0	46.1	92	70-134
Haloether 508	50.0	46.4	93	52-139
Haloether 528	50.0	46.6	93	48-157
Halomar	50.0	45.7	91	62-128
2-Hexanone	50.0	46.5	93	36-170
Isoflurane	50.0	46.4	93	61-132
Methoxyflurane	50.0	43.5	87	72-124
Methylene Chloride	50.0	44.0	88	46-168
4-Methyl-2-pentanone (MIBK)	50.0	47.5	95	26-171
Styrene	50.0	49.9	100	72-133
1,1,2,2-Tetrachloroethane	50.0	47.4	95	15-179
Tetrachloroethene	50.0	54.5	109	46-157
Toluene	50.0	46.4	93	69-126
1,1,1-Trichloroethane	50.0	45.5	91	62-131
1,1,2-Trichloroethane	50.0	43.3	87	58-144
Trichloroethene	50.0	46.4	93	67-132
Trichlorofluoromethane	50.0	44.6	89	39-171

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New Orleans

Lab Sample ID: 415095LCS

Date Extracted: 12/12/2017

Date Analyzed (1): 12/12/2017

Instrument: 20MSVD

LCS Lot No: 54695

Lab File ID: 121217.B\1212D07.D

SDG No.: 2066645

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
1,2,3-Trichloropropane	50.0	49.3	99	13-187
1,1,2-Trichlorotrifluoroethane	50.0	43.7	87	38-121
Vinyl chloride	50.0	37.3	75	27-149
m&p-Xylene	100	95.4	95	65-129
o-Xylene	50.0	49.4	99	65-124

Spike Recovery: 0 out of 52 outside limits.

MSV - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New Orleans
Matrix Spike - Sample No: 415096MS
Date Extracted: 12/12/2017
Date Analyzed (1): 12/12/2017
Instrument: 20MSVD
Lab File ID: 121217.B\1212D08.D
Parent Sample ID: 2066643003
SDG No.: 2066645

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
1,1,1-Trichloroethane	50.0	ND	55.1	110	54-137
1,1,2,2-Tetrachloroethane	50.0	ND	52.9	106	15-187
1,1,2-Trichloroethane	50.0	ND	48.2	96	59-148
1,1,2-Trichlorotrifluoroethane	50.0	ND	53.1	106	40-117
1,1-Dichloroethane	50.0	ND	54.9	110	59-133
1,1-Dichloroethene	50.0	ND	53.8	108	44-146
1,2,3-Trichloropropane	50.0	ND	53.1	106	14-199
1,2-Dichloroethane	50.0	ND	50.1	100	56-154
1,2-Dichloropropane	50.0	ND	53.0	106	62-135
2-Butanone (MEK)	50.0	ND	43.5	87	20-205
2-Hexanone	50.0	ND	48.9	98	25-189
4-Methyl-2-pentanone (MIBK)	50.0	ND	49.7	99	23-184
Acetone	50.0	ND	44.5	85	11-217
Acrolein	50.0	ND	42.0	84	10-142
Acrylonitrile	50.0	ND	45.1	90	20-164
Benzene	50.0	ND	52.1	104	52-141
Bromodichloromethane	50.0	ND	52.0	104	70-134
Bromoform	50.0	ND	46.3	93	37-171
Bromomethane	50.0	ND	55.1	110	34-155
Carbon disulfide	50.0	ND	53.2	106	28-130
Carbon tetrachloride	50.0	ND	59.2	118	48-146
Chlorobenzene	50.0	ND	57.7	115	67-129
Chloroethane	50.0	ND	52.4	105	12-192
Chloroform	50.0	ND	54.5	109	66-143
Chloromethane	50.0	ND	49.1	98	14-155
Dibromochloromethane	50.0	ND	47.6	95	50-150
Dibromomethane	50.0	ND	50.2	100	58-153
Enflurane	50.0	ND	59.7	119	63-126
Ethylbenzene	50.0	ND	56.0	112	57-135
Haloether 229	50.0	ND	46.1	92	56-127
Haloether 406	50.0	ND	57.8	116	68-128
Haloether 421	50.0	ND	53.8	108	74-120
Haloether 427	50.0	ND	60.4	121	78-120
Haloether 428	50.0	ND	56.0	112	74-125
Haloether 508	50.0	ND	57.2	114	28-156
Haloether 528	50.0	ND	55.3	111	45-142
Halomar	50.0	ND	55.1	110	67-123
Isoflurane	50.0	ND	57.8	116	45-140
Methoxyflurane	50.0	ND	50.6	101	75-119
Methylene Chloride	50.0	ND	49.6	99	45-166
Styrene	50.0	ND	56.1	112	58-144
Tetrachloroethene	50.0	ND	61.7	123	48-143
Toluene	50.0	ND	54.2	108	59-136
Trichloroethene	50.0	ND	54.8	110	58-140
Trichlorofluoromethane	50.0	ND	54.7	109	24-175
Vinyl chloride	50.0	ND	44.4	89	21-150
cis-1,2-Dichloroethene	50.0	ND	51.5	103	56-141

MSV - FORM III VOA-2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New Orleans

Matrix Spike - Sample No: 415096MS

Date Extracted: 12/12/2017

Date Analyzed (1): 12/12/2017

Instrument: 20MSVD

Lab File ID: 121217.B\1212D08.D

Parent Sample ID: 2066643003

SDG No.: 2066645

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
cis-1,3-Dichloropropene	50.0	ND	54.3	109	70-139
m&p-Xylene	100	ND	110	110	56-136
o-Xylene	50.0	ND	54.3	109	57-133
trans-1,2-Dichloroethene	50.0	ND	56.6	113	57-132
trans-1,3-Dichloropropene	50.0	ND	52.1	104	59-154

Spike Recovery: 1 out of 52 outside limits.

MSV - FORM III VOA-3

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 20MSVD Matrix Spike Duplicate - Sample No: 415097MSD

Lab File ID (2): 121217.B\1212D09.D Date Analyzed (2): 12/12/2017

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,1,1-Trichloroethane	50.0	47.9	96	14	0-20	54-137
1,1,2,2-Tetrachloroethane	50.0	48.4	97	9	0-20	15-187
1,1,2-Trichloroethane	50.0	45.3	91	6	0-20	59-148
1,1,2-Trichlorotrifluoroethane	50.0	46.0	92	14	0-20	40-117
1,1-Dichloroethane	50.0	48.5	97	12	0-20	59-133
1,1-Dichloroethene	50.0	46.9	94	14	0-20	44-146
1,2,3-Trichloropropane	50.0	47.7	95	11	0-20	14-199
1,2-Dichloroethane	50.0	45.2	90	10	0-20	56-154
1,2-Dichloropropane	50.0	47.5	95	11	0-20	62-135
2-Butanone (MEK)	50.0	40.2	80	8	0-20	20-205
2-Hexanone	50.0	46.4	93	5	0-20	25-189
4-Methyl-2-pentanone (MIBK)	50.0	47.6	95	4	0-20	23-184
Acetone	50.0	42.6	81	5	0-20	11-217
Acrolein	50.0	40.1	80	5	0-20	10-142
Acrylonitrile	50.0	42.4	85	6	0-20	20-164
Benzene	50.0	46.3	93	12	0-20	52-141
Bromodichloromethane	50.0	47.1	94	10	0-20	70-134
Bromoform	50.0	41.7	83	10	0-20	37-171
Bromomethane	50.0	48.6	97	12	0-20	34-155
Carbon disulfide	50.0	44.3	89	18	0-20	28-130
Carbon tetrachloride	50.0	52.1	104	13	0-20	48-146
Chlorobenzene	50.0	51.7	103	11	0-20	67-129
Chloroethane	50.0	44.4	89	17	0-20	12-192
Chloroform	50.0	48.0	96	13	0-20	66-143
Chloromethane	50.0	42.0	84	16	0-20	14-155
Dibromochloromethane	50.0	43.1	86	10	0-20	50-150
Dibromomethane	50.0	45.3	91	10	0-20	58-153
Enflurane	50.0	51.4	103	15	0-20	63-126
Ethylbenzene	50.0	50.0	100	11	0-20	57-135
Haloether 229	50.0	41.1	82	12	0-20	56-127
Haloether 406	50.0	50.2	100	14	0-20	68-128
Haloether 421	50.0	47.3	95	13	0-20	74-120
Haloether 427	50.0	54.4	109	11	0-20	78-120
Haloether 428	50.0	50.9	102	10	0-20	74-125
Haloether 508	50.0	48.0	96	18	0-20	28-156
Haloether 528	50.0	48.9	98	12	0-20	45-142
Halomar	50.0	47.9	96	14	0-20	67-123
Isoflurane	50.0	50.8	102	13	0-20	45-140
Methoxyflurane	50.0	45.5	91	11	0-20	75-119
Methylene Chloride	50.0	42.5	85	15	0-20	45-166
Styrene	50.0	51.0	102	10	0-20	58-144
Tetrachloroethene	50.0	56.9	114	8	0-20	48-143
Toluene	50.0	47.6	95	13	0-20	59-136
Trichloroethene	50.0	49.2	98	11	0-20	58-140
Trichlorofluoromethane	50.0	47.8	96	14	0-20	24-175
Vinyl chloride	50.0	38.0	76	16	0-20	21-150
cis-1,2-Dichloroethene	50.0	44.1	88	16	0-20	56-141
cis-1,3-Dichloropropene	50.0	47.8	96	13	0-20	70-139
m&p-Xylene	100	99.2	99	10	0-20	56-136

MSV - FORM III VOA-4

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 20MSVD Matrix Spike Duplicate - Sample No: 415097MSD

Lab File ID (2): 121217.B\1212D09.D Date Analyzed (2): 12/12/2017

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
o-Xylene	50.0	49.9	100	9	0-20	57-133
trans-1,2-Dichloroethene	50.0	48.3	97	16	0-20	57-132
trans-1,3-Dichloropropene	50.0	47.1	94	10	0-20	59-154

RPD: 0 out of 52 outside limits.

Spike Recovery: 0 out of 52 outside limits.

SAMPLE NO.

415094BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017

Instrument ID: 20MSVD Matrix: Water Lab Sample ID: 415094

Lab File ID (1): 121217.B\1212D06.D Date Analyzed (1): 12/12/2017 Time (1):10:15

Lab File ID (2): 121217HA.B\1212D06.D Date Analyzed (2): 12/12/2017 Time (2):10:15

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
415095LCS	415095	121217HA.B\1212D07.D	12/12/2017 10:33
415095LCS	415095	121217.B\1212D07.D	12/12/2017 10:33
TB-20171204	2066645001	121217.B\1212D15.D	12/12/2017 12:54
TB-20171204	2066645001	121217HA.B\1212D15.D	12/12/2017 12:54
EB-20171204	2066645002	121217.B\1212D16.D	12/12/2017 13:11
EB-20171204	2066645002	121217HA.B\1212D16.D	12/12/2017 13:11
FB-20171204	2066645003	121217.B\1212D17.D	12/12/2017 13:29
FB-20171204	2066645003	121217HA.B\1212D17.D	12/12/2017 13:29
MW-1A-3-BP	2066645004	121217HA.B\1212D18.D	12/12/2017 13:47
MW-1A-3-BP	2066645004	121217.B\1212D18.D	12/12/2017 13:47
MW-1D-3-BP	2066645005	121217HA.B\1212D19.D	12/12/2017 14:05
MW-1D-3-BP	2066645005	121217.B\1212D19.D	12/12/2017 14:05
EB-20171205	2066645006	121217HA.B\1212D20.D	12/12/2017 14:23
EB-20171205	2066645006	121217.B\1212D20.D	12/12/2017 14:23
FB-20171205	2066645007	121217.B\1212D21.D	12/12/2017 14:41
FB-20171205	2066645007	121217HA.B\1212D21.D	12/12/2017 14:41
MW-4B-2	2066645008	121217.B\1212D22.D	12/12/2017 14:58
MW-4B-2	2066645008	121217HA.B\1212D22.D	12/12/2017 14:58
MW-4B-4	2066645009	121217HA.B\1212D23.D	12/12/2017 15:16
MW-4B-4	2066645009	121217.B\1212D23.D	12/12/2017 15:16
MW-1	2066645010	121217.B\1212D24.D	12/12/2017 15:34
MW-1	2066645010	121217HA.B\1212D24.D	12/12/2017 15:34
MW-3A-4	2066645011	121217.B\1212D25.D	12/12/2017 15:52
MW-3A-4	2066645011	121217HA.B\1212D25.D	12/12/2017 15:52
EB-20171206	2066645012	121217HA.B\1212D26.D	12/12/2017 16:09
EB-20171206	2066645012	121217.B\1212D26.D	12/12/2017 16:09
MW-1D-3	2066645013	121217HA.B\1212D27.D	12/12/2017 16:27
MW-1D-3	2066645013	121217.B\1212D27.D	12/12/2017 16:27
FB-20171206	2066645014	121217.B\1212D28.D	12/12/2017 16:45
FB-20171206	2066645014	121217HA.B\1212D28.D	12/12/2017 16:45
MW-9-90	2066645015	121217HA.B\1212D29.D	12/12/2017 17:03
MW-9-90	2066645015	121217.B\1212D29.D	12/12/2017 17:03

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017

Lab File ID: 111717.B\1117D03BFB.D BFB Injection Date: 11/17/2017

Instrument ID: 20MSVD BFB Injection Time: 08:53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	27.64	
~~50~~	~~15.00 - 40.00% of mass 95~~	~~27.64~~	
75	30.00 - 60.00% of mass 95	49.16	
~~75~~	~~30.00 - 60.00% of mass 95~~	~~49.16~~	
95	Base Peak, 100.00% relative abundance	100.00	
~~95~~	~~Base Peak, 100.00% relative abundance~~	~~100.00~~	
96	5.00 - 9.00% of mass 95	6.70	
~~96~~	~~5.00 - 9.00% of mass 95~~	~~6.70~~	
173	Less than 2.00% of mass 174	1.05	(1.09)[1]
~~173~~	~~Less than 2.00% of mass 174~~	~~1.05~~	~~(1.09)[1]~~
174	50.00 - 120.00% of mass 95	96.13	
~~174~~	~~50.00 - 120.00% of mass 95~~	~~96.13~~	
175	5.00 - 9.00% of mass 174	7.68	(7.99)[1]
~~175~~	~~5.00 - 9.00% of mass 174~~	~~7.68~~	~~(7.99)[1]~~
176	95.00 - 101.00% of mass 174	94.47	(98.27)[1]
~~176~~	~~95.00 - 101.00% of mass 174~~	~~94.47~~	~~(98.27)[1]~~
177	5.00 - 9.00% of mass 176	6.30	(6.67)[2]
~~177~~	~~5.00 - 9.00% of mass 176~~	~~6.30~~	~~(6.67)[2]~~

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
3563537CAL1	3563537CAL1	111717HA.B\1117D05.D	11/17/2017	09:29
3563677CAL1	3563677CAL1	111717.B\1117D05.D	11/17/2017	09:29
3563683CAL2	3563683CAL2	111717.B\1117D06.D	11/17/2017	09:47
3563541CAL2	3563541CAL2	111717HA.B\1117D06.D	11/17/2017	09:47
3563536CAL3	3563536CAL3	111717HA.B\1117D07.D	11/17/2017	10:05
3563685CAL3	3563685CAL3	111717.B\1117D07.D	11/17/2017	10:05
3563534CAL4	3563534CAL4	111717HA.B\1117D08.D	11/17/2017	10:23
3563684CAL4	3563684CAL4	111717.B\1117D08.D	11/17/2017	10:23
3563540CAL5	3563540CAL5	111717HA.B\1117D09.D	11/17/2017	10:41
3563687CAL5	3563687CAL5	111717.B\1117D09.D	11/17/2017	10:41
3563682CAL6	3563682CAL6	111717.B\1117D10.D	11/17/2017	10:59
3563538CAL6	3563538CAL6	111717HA.B\1117D10.D	11/17/2017	10:59
3563686CAL7	3563686CAL7	111717.B\1117D11.D	11/17/2017	11:16
3563535CAL7	3563535CAL7	111717HA.B\1117D11.D	11/17/2017	11:16

MSV - FORM V VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017

Lab File ID: 111717.B\1117D03BFB.D BFB Injection Date: 11/17/2017

Instrument ID: 20MSVD BFB Injection Time: 08:53

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
3563539ICV	3563539ICV	111717HA.B\1117D13.D	11/17/2017	12:39
3563676ICV	3563676ICV	111717.B\1117D15.D	11/17/2017	13:24

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017

Lab File ID: 120417.B\1204D06BFB.D BFB Injection Date: 12/04/2017

Instrument ID: 20MSVD BFB Injection Time: 10:22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	32.15	
75	30.00 - 60.00% of mass 95	48.00	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.91	
173	Less than 2.00% of mass 174	1.31	(1.15)[1]
174	50.00 - 120.00% of mass 95	113.84	
175	5.00 - 9.00% of mass 174	9.25	(8.13)[1]
176	95.00 - 101.00% of mass 174	113.00	(99.26)[1]
177	5.00 - 9.00% of mass 176	7.11	(6.29)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
3593956CAL8	3593956CAL8	120417.B\1204D08.D	12/04/2017	10:58
3593957CAL1	3593957CAL1	120417.B\1204D09.D	12/04/2017	11:16
3593958CAL2	3593958CAL2	120417.B\1204D10.D	12/04/2017	11:34
3593961CAL3	3593961CAL3	120417.B\1204D11.D	12/04/2017	11:51
3593962CAL4	3593962CAL4	120417.B\1204D12.D	12/04/2017	12:09
3593955CAL5	3593955CAL5	120417.B\1204D13.D	12/04/2017	12:27
3593960CAL6	3593960CAL6	120417.B\1204D14.D	12/04/2017	12:44
3593959CAL7	3593959CAL7	120417.B\1204D15.D	12/04/2017	13:02
3594009ICV	3594009ICV	120417.B\1204D20.D	12/04/2017	15:32

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017
Lab File ID: 121217.B\1212D04BFB.D BFB Injection Date: 12/12/2017
Instrument ID: 20MSVD BFB Injection Time: 09:40

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	31.74	
75	30.00 - 60.00% of mass 95	46.85	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.43	
173	Less than 2.00% of mass 174	0.76	(0.66)[1]
174	50.00 - 120.00% of mass 95	114.86	
175	5.00 - 9.00% of mass 174	8.97	(7.81)[1]
176	95.00 - 101.00% of mass 174	114.57	(99.75)[1]
177	5.00 - 9.00% of mass 176	8.04	(7.02)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
3612665CCV	3612665CCV	121217HA.B\1212D04.D	12/12/2017	09:40
3612660CCV	3612660CCV	121217.B\1212D04.D	12/12/2017	09:40
415094BLANK	415094BLANK	121217HA.B\1212D06.D	12/12/2017	10:15
415094BLANK	415094BLANK	121217.B\1212D06.D	12/12/2017	10:15
415095LCS	415095LCS	121217.B\1212D07.D	12/12/2017	10:33
415095LCS	415095LCS	121217HA.B\1212D07.D	12/12/2017	10:33
TB-20171204	2066645001	121217HA.B\1212D15.D	12/12/2017	12:54
TB-20171204	2066645001	121217.B\1212D15.D	12/12/2017	12:54
EB-20171204	2066645002	121217HA.B\1212D16.D	12/12/2017	13:11
EB-20171204	2066645002	121217.B\1212D16.D	12/12/2017	13:11
FB-20171204	2066645003	121217.B\1212D17.D	12/12/2017	13:29
FB-20171204	2066645003	121217HA.B\1212D17.D	12/12/2017	13:29
MW-1A-3-BP	2066645004	121217.B\1212D18.D	12/12/2017	13:47
MW-1A-3-BP	2066645004	121217HA.B\1212D18.D	12/12/2017	13:47
MW-1D-3-BP	2066645005	121217.B\1212D19.D	12/12/2017	14:05
MW-1D-3-BP	2066645005	121217HA.B\1212D19.D	12/12/2017	14:05
EB-20171205	2066645006	121217.B\1212D20.D	12/12/2017	14:23
EB-20171205	2066645006	121217HA.B\1212D20.D	12/12/2017	14:23
FB-20171205	2066645007	121217.B\1212D21.D	12/12/2017	14:41
FB-20171205	2066645007	121217HA.B\1212D21.D	12/12/2017	14:41
MW-4B-2	2066645008	121217.B\1212D22.D	12/12/2017	14:58
MW-4B-2	2066645008	121217HA.B\1212D22.D	12/12/2017	14:58
MW-4B-4	2066645009	121217HA.B\1212D23.D	12/12/2017	15:16

MSV - FORM V VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017

Lab File ID: 121217.B\1212D04BFB.D BFB Injection Date: 12/12/2017

Instrument ID: 20MSVD BFB Injection Time: 09:40

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
MW-4B-4	2066645009	121217.B\1212D23.D	12/12/2017	15:16
MW-1	2066645010	121217.B\1212D24.D	12/12/2017	15:34
MW-1	2066645010	121217HA.B\1212D24.D	12/12/2017	15:34
MW-3A-4	2066645011	121217.B\1212D25.D	12/12/2017	15:52
MW-3A-4	2066645011	121217HA.B\1212D25.D	12/12/2017	15:52
EB-20171206	2066645012	121217HA.B\1212D26.D	12/12/2017	16:09
EB-20171206	2066645012	121217.B\1212D26.D	12/12/2017	16:09
MW-1D-3	2066645013	121217HA.B\1212D27.D	12/12/2017	16:27
MW-1D-3	2066645013	121217.B\1212D27.D	12/12/2017	16:27
FB-20171206	2066645014	121217.B\1212D28.D	12/12/2017	16:45
FB-20171206	2066645014	121217HA.B\1212D28.D	12/12/2017	16:45
MW-9-90	2066645015	121217.B\1212D29.D	12/12/2017	17:03
MW-9-90	2066645015	121217HA.B\1212D29.D	12/12/2017	17:03

MSV - FORM VIII VOA-1

MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - New Orleans SDG No.: 2066645 Contract: 2SAR2017

Sample ID : 3612660CCV Date Analyzed: 12/12/2017

Instrument ID: 20MSVD GC Column: Col 1 Time Analyzed: 09:40

Lab File ID: 121217.B\1212D04.D

		AREA 14DDIS	RT	AREA 14DFBIS	RT	AREA CBD5IS	RT	AREA PTFBIS	RT
12 HOUR STD		426267	11.235	1043238	7.144	445087	9.789	322972	6.645
UPPER LIMIT		852534	11.735	2086476	7.644	890174	10.289	645944	7.145
LOWER LIMIT		213133.5	10.735	521619	6.644	222543.5	9.289	161486	6.145
LAB SAMPLE ID	SAMPLE NO.								
415094	415094BLANK	422206	11.235	1018538	7.144	437007	9.789	317207	6.651
415095	415095LCS	472305	11.234	1107643	7.144	466168	9.789	352171	6.65
2066645001	TB-20171204	389470	11.235	968860	7.144	420657	9.789	289100	6.645
2066645002	EB-20171204	409383	11.235	964117	7.144	418437	9.789	307532	6.65
2066645003	FB-20171204	384678	11.235	927754	7.144	383046	9.789	282106	6.65
2066645004	MW-1A-3-BP	378139	11.235	922412	7.144	392063	9.789	290158	6.65
2066645005	MW-1D-3-BP	374369	11.23	915296	7.144	392614	9.789	278322	6.65
2066645006	EB-20171205	373694	11.235	911677	7.144	385751	9.789	287476	6.65
2066645007	FB-20171205	362236	11.23	892050	7.144	375326	9.784	275762	6.651
2066645008	MW-4B-2	381133	11.235	911366	7.144	384295	9.789	279060	6.65
2066645009	MW-4B-4	363680	11.235	867945	7.144	371558	9.789	269863	6.655
2066645010	MW-1	362697	11.235	895160	7.144	375388	9.789	276529	6.65
2066645011	MW-3A-4	369472	11.23	875982	7.144	374689	9.789	269244	6.65
2066645012	EB-20171206	354022	11.235	857100	7.144	362638	9.789	265639	6.645
2066645013	MW-1D-3	336566	11.23	841447	7.144	353580	9.784	257457	6.651
2066645014	FB-20171206	352481	11.235	850110	7.144	354681	9.789	262432	6.651
2066645015	MW-9-90	364612	11.235	876883	7.144	381939	9.789	279191	6.65

14DDIS = 1,4-Dichlorobenzene-d4 (IS)

14DFBIS = 1,4-Difluorobenzene (IS)

CBD5IS = Chlorobenzene-D5 (IS)

PTFBIS = Pentafluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area

AREA LOWER LIMIT = 50% of Internal Standard Area

RT UPPER LIMIT = +0.50 minutes of Internal Standard RT

RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

TB-20171204

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 12:54
Lab Sample ID: 2066645001
Date Analyzed: 12/12/2017 12:54
Lab File ID: 121217.B\1212D15.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

TB-20171204

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 12:54
Lab Sample ID: 2066645001
Date Analyzed: 12/12/2017 12:54
Lab File ID: 121217.B\1212D15.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

TB-20171204

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 12:54
Lab Sample ID: 2066645001
Date Analyzed: 12/12/2017 12:54
Lab File ID: 121217HA.B\1212D15.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d15.d
Lab Smp Id: 2066645001 Client Smp ID: TB-20171204
Inj Date : 12-DEC-2017 12:54
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645001
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.146	4.146	(0.624)	5206	3.54431	3.54(M)	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.929)	328412	51.5999	51.6	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.645	6.645	(1.000)	289100	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	968860	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1066231	49.1851	49.2	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	420657	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	403610	52.4041	52.4	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D
	76 2-Chlorotoluene	91	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
77	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78	1,2,3-Trichloropropane	110	Compound Not Detected.						
79	4-Chlorotoluene	91	Compound Not Detected.						
80	tert-Butylbenzene	91	Compound Not Detected.						
81	Pentachloroethane	167	Compound Not Detected.						
82	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83	sec-Butylbenzene	105	Compound Not Detected.						
84	p-Isopropyltoluene	119	Compound Not Detected.						
85	1,3-Dichlorobenzene	146	Compound Not Detected.						(D
* 86	1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	389470	50.0000		
87	1,4-Dichlorobenzene	146	Compound Not Detected.						
88	n-Butylbenzene	91	Compound Not Detected.						
89	1,2-Dichlorobenzene	146	Compound Not Detected.						
90	1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91	Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93	Naphthalene	128	Compound Not Detected.						
94	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d15.d
Lab Smp Id: 2066645001 Client Smp ID: TB-20171204
Inj Date : 12-DEC-2017 12:54
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645001
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.645	6.645	(1.000)	289100	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	968860	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	420657	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	390157	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d15.d

Date : 12-DEC-2017 12:54

Client ID: TB-20171204

Instrument: 20msvd.i

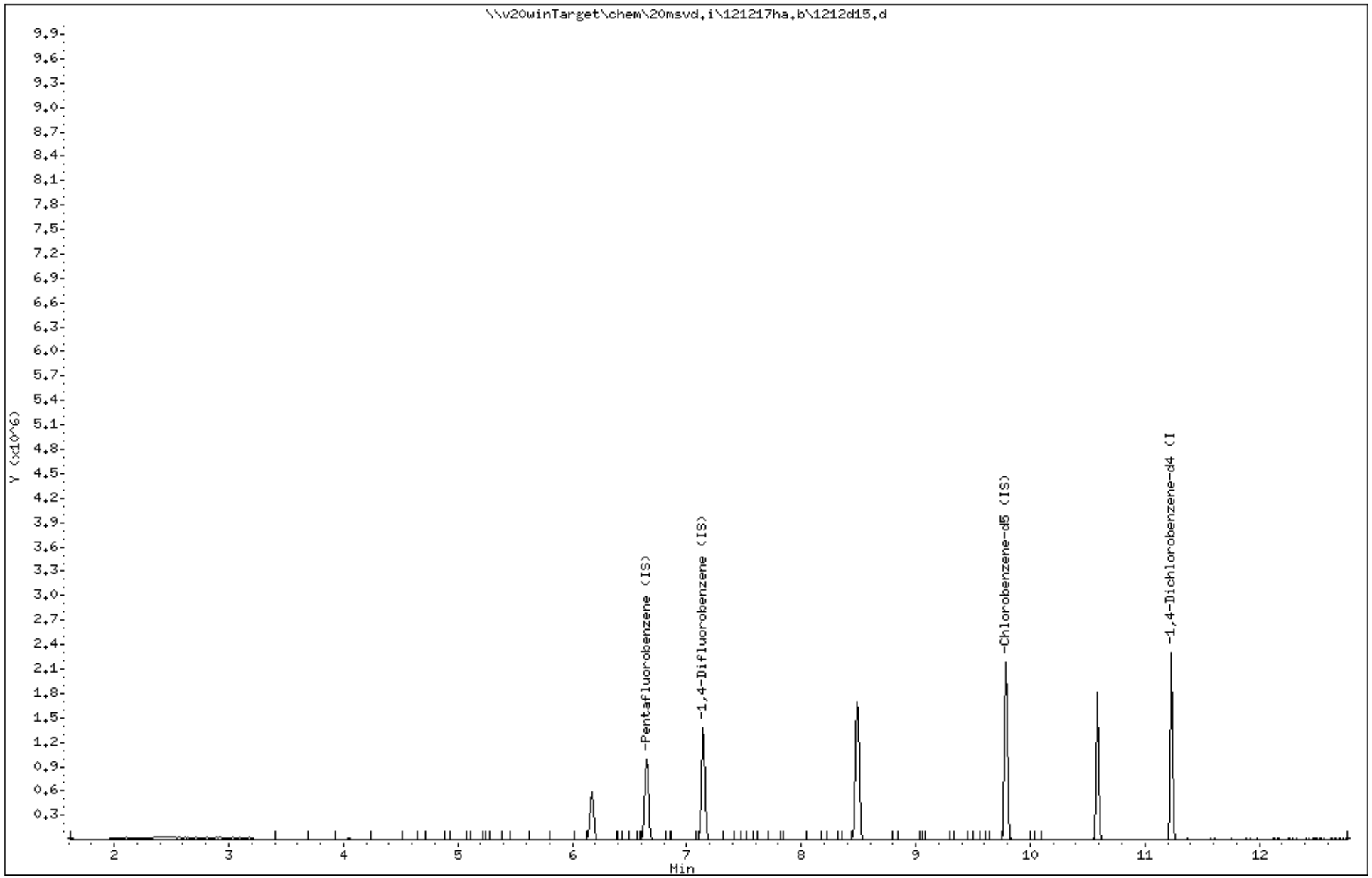
Sample Info: 2066645001

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



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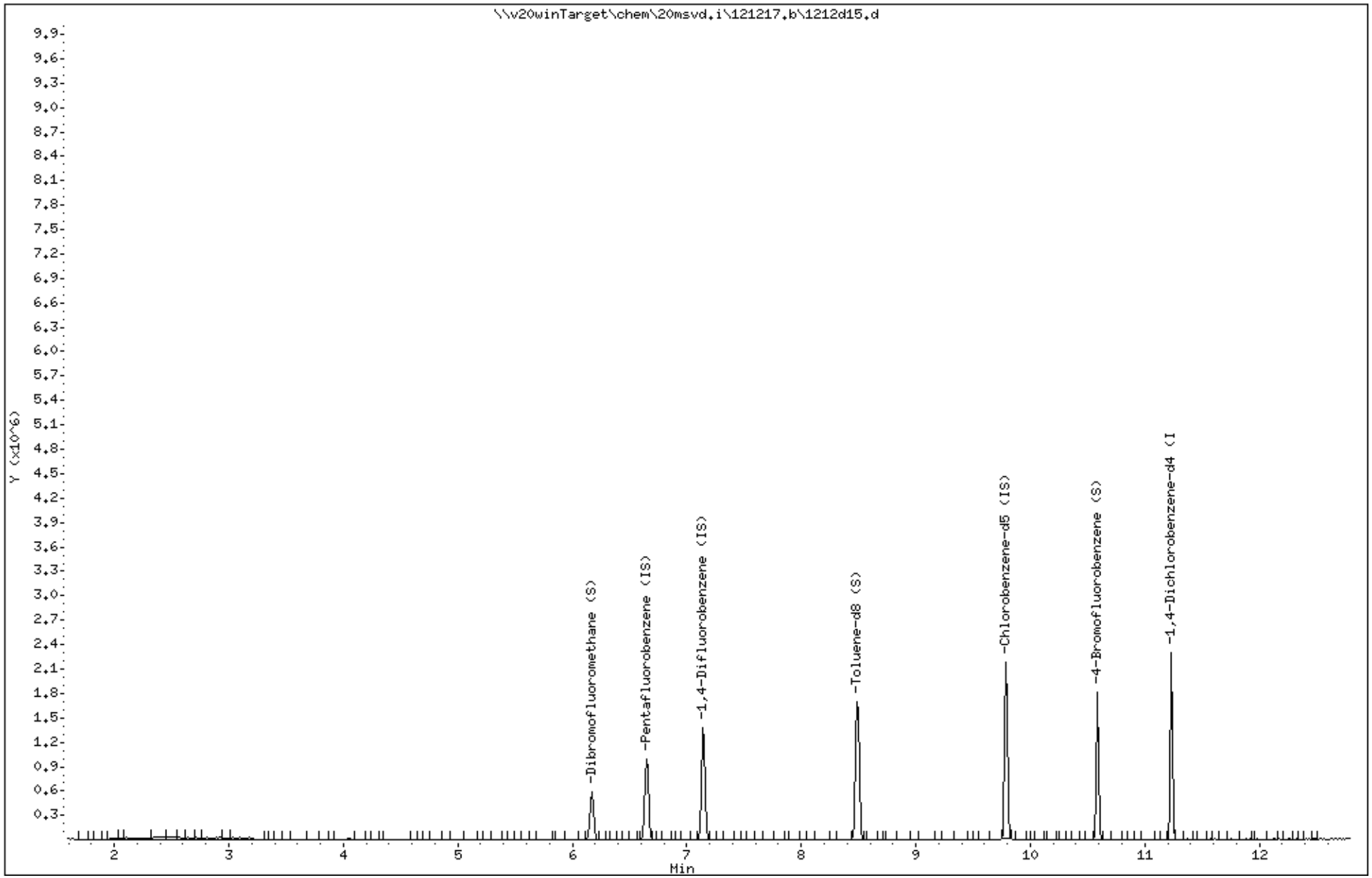
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d15.d
Injection Date: 12-DEC-2017 12:54
Instrument: 20msvd.i
Lab Sample ID: 2066645001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d15.d
Date : 12-DEC-2017 12:54
Client ID: TB-20171204
Sample Info: 2066645001
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d15.d

Date : 12-DEC-2017 12:54

Client ID: TB-20171204

Instrument: 20msvd.i

Sample Info: 2066645001

Purge Volume: 5.0

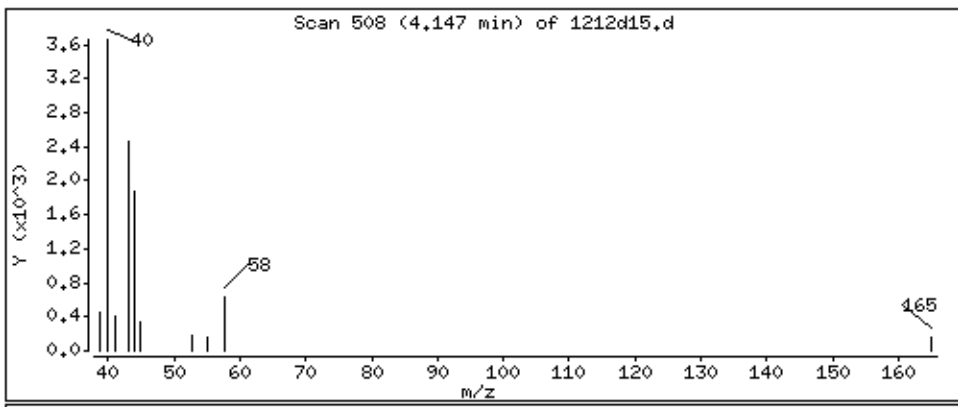
Operator: GEM

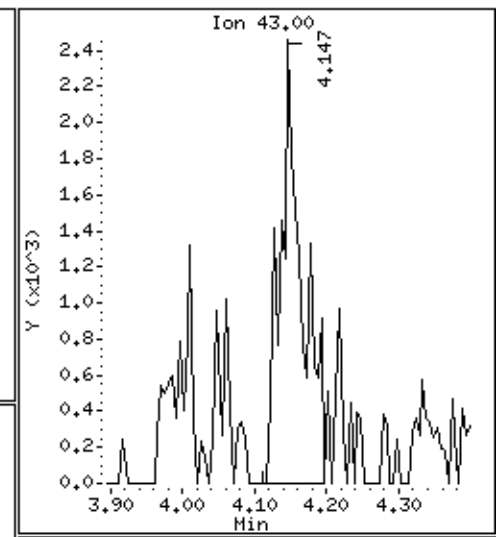
Column phase: RTX VMS 30m

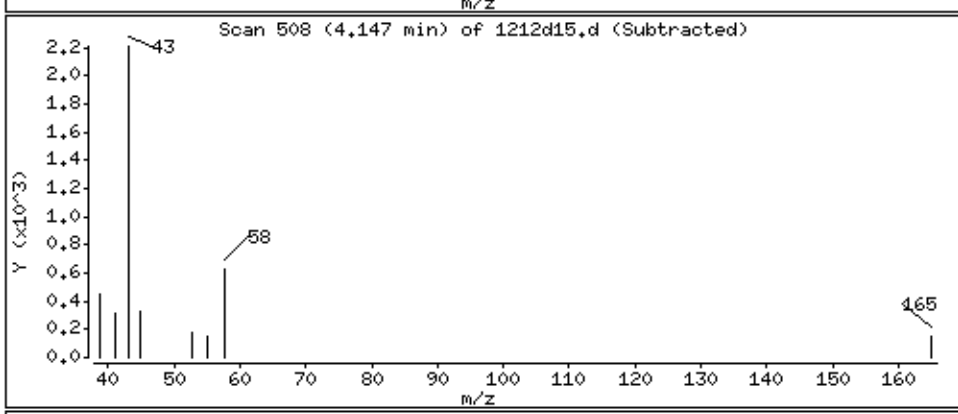
Column diameter: 0.25

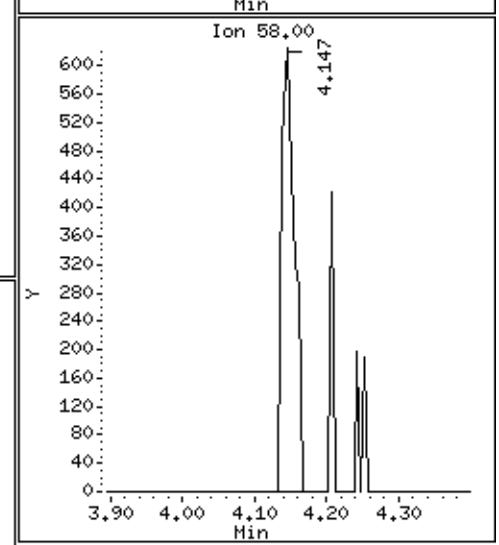
14 Acetone

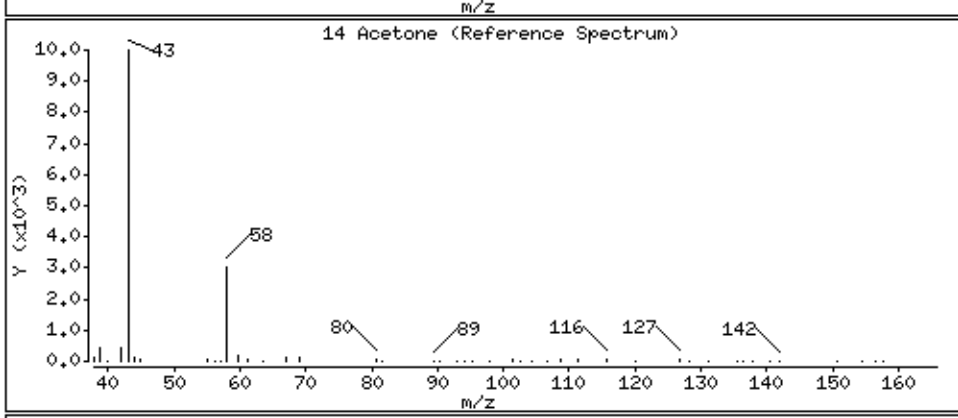
Concentration: 3.54 ug/L

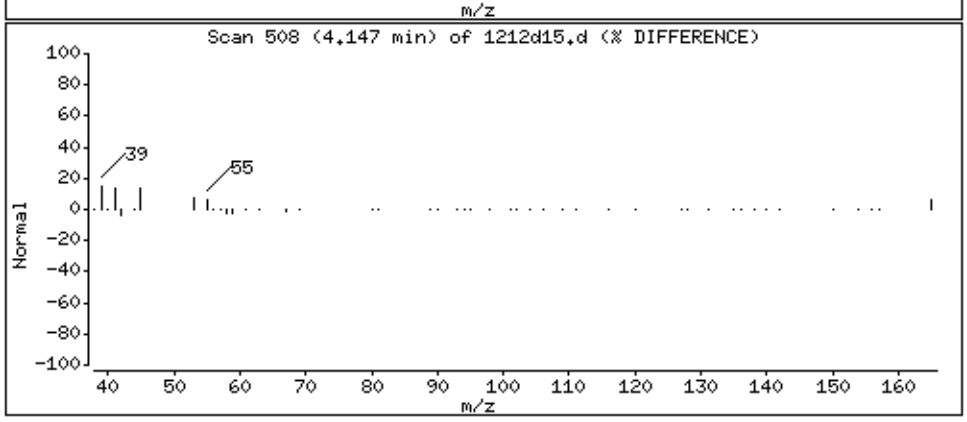






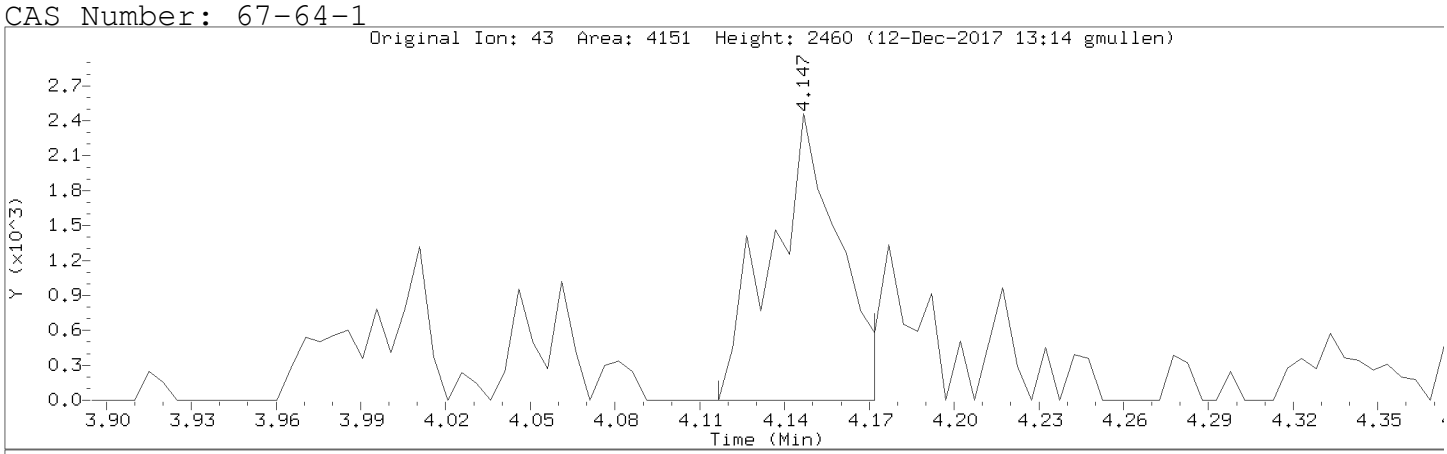


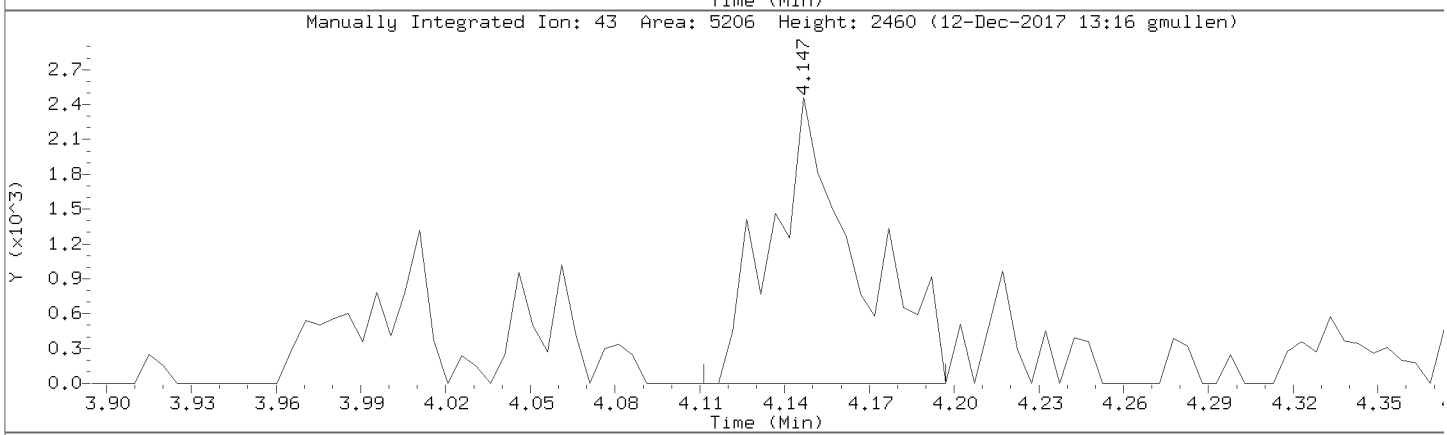


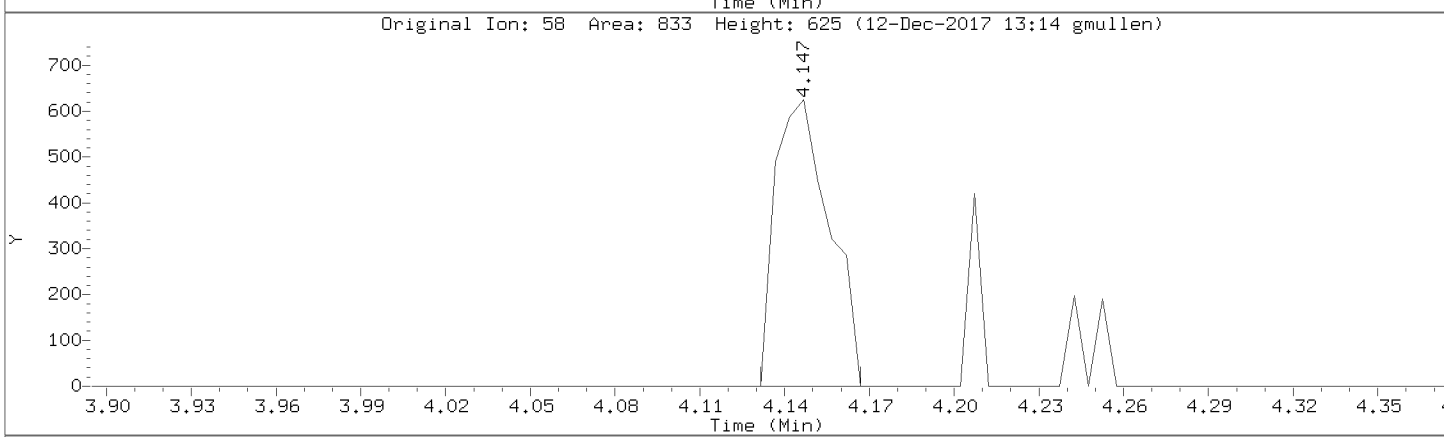


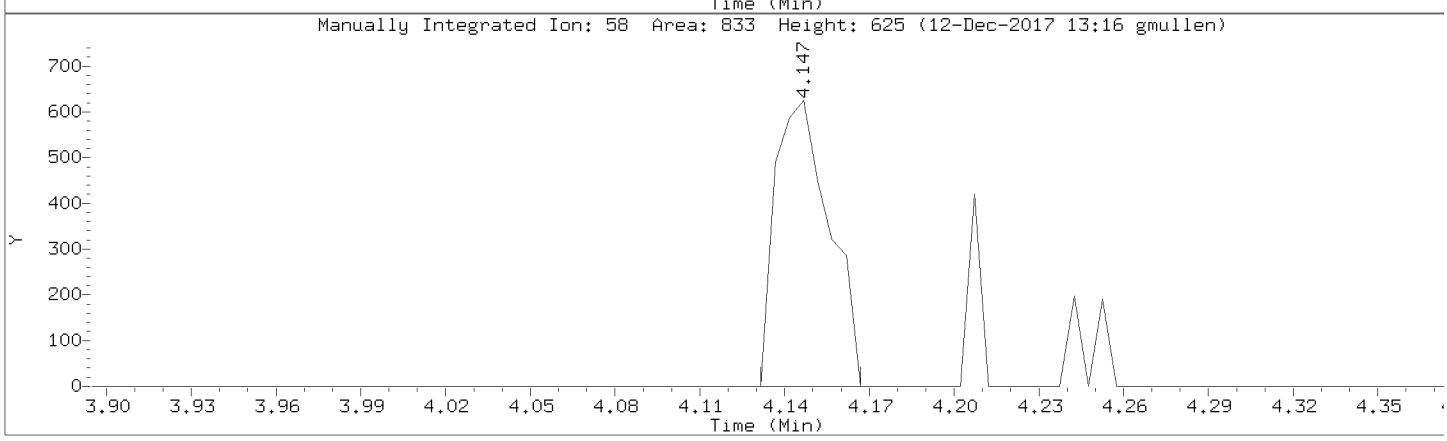
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d15.d
Injection Date: 12-DEC-2017 12:54
Instrument: 20msvd.i
Lab Sample ID: 2066645001

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









SAMPLE NO.

EB-20171204

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:11
Lab Sample ID: 2066645002
Date Analyzed: 12/12/2017 13:11
Lab File ID: 121217.B\1212D16.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	8.0	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

EB-20171204

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:11
Lab Sample ID: 2066645002
Date Analyzed: 12/12/2017 13:11
Lab File ID: 121217.B\1212D16.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

EB-20171204

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:11
Lab Sample ID: 2066645002
Date Analyzed: 12/12/2017 13:11
Lab File ID: 121217HA.B\1212D16.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d16.d
Lab Smp Id: 2066645002 Client Smp ID: EB-20171204
Inj Date : 12-DEC-2017 13:11
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645002
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	307532	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	964927	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	418437	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	409383	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d16.d
Lab Smp Id: 2066645002 Client Smp ID: EB-20171204
Inj Date : 12-DEC-2017 13:11
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645002
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	4.050	4.045	(0.609)	8926	1.60254	1.60(M)	
14 Acetone	43	4.156	4.146	(0.625)	12302	7.98843	7.99	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						(D
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	333459	49.2527	49.2	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						(D
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	307532	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	964117	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1094081	50.7181	50.7	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	418437	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	409891	50.6309	50.6	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

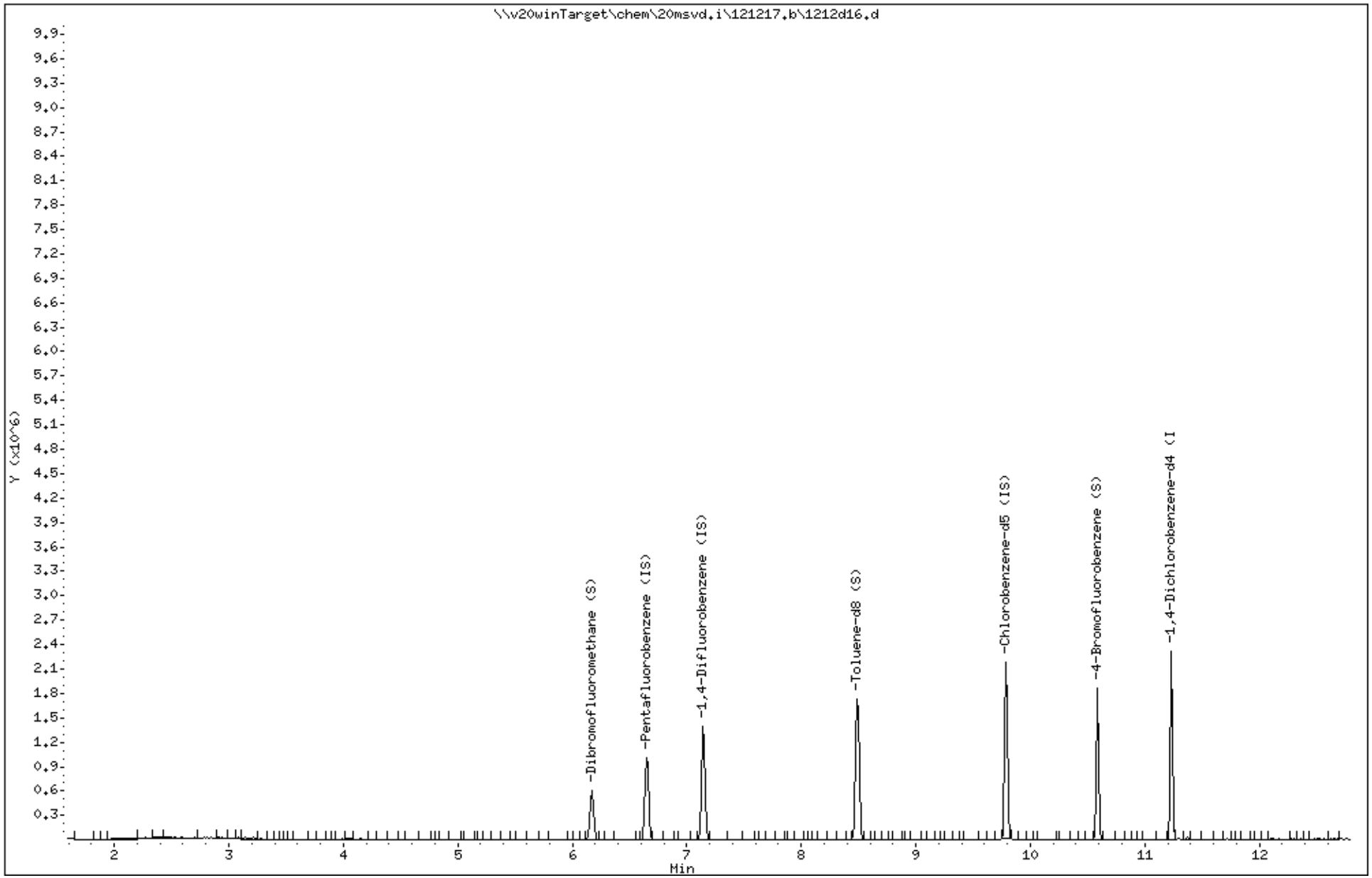
Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	409383	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d16.d
Date : 12-DEC-2017 13:11
Client ID: EB-20171204
Sample Info: 2066645002
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d16.d

Date : 12-DEC-2017 13:11

Client ID: EB-20171204

Instrument: 20msvd.i

Sample Info: 2066645002

Purge Volume: 5.0

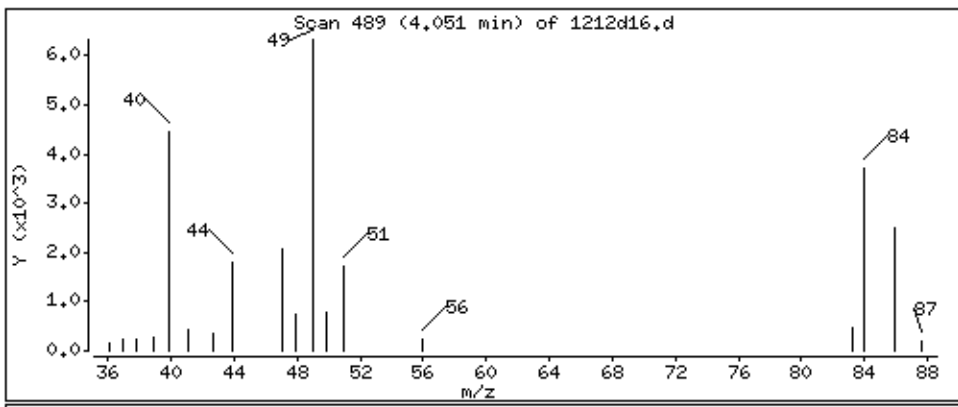
Operator: GEM

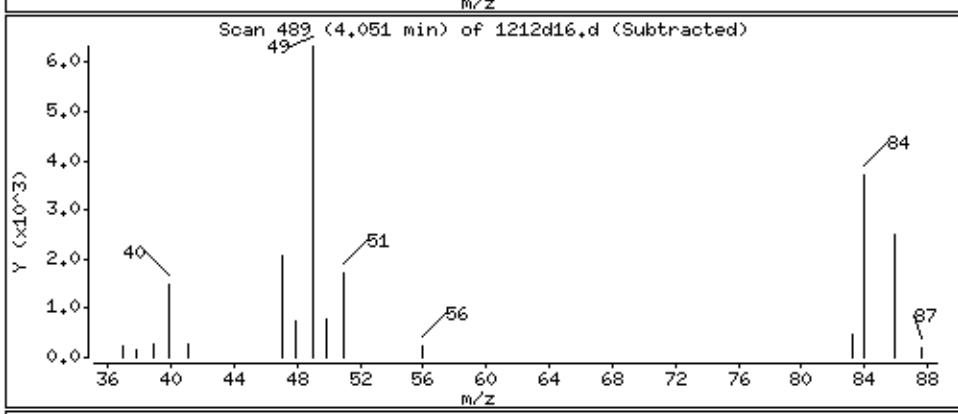
Column phase: RTX VMS 30m

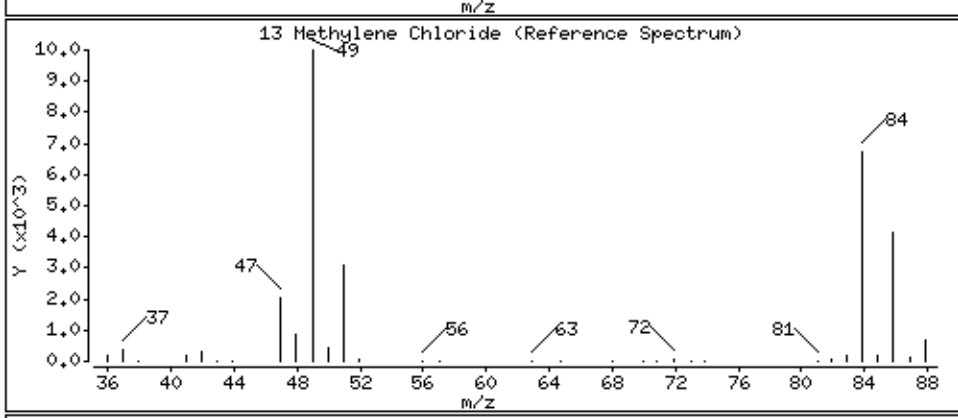
Column diameter: 0.25

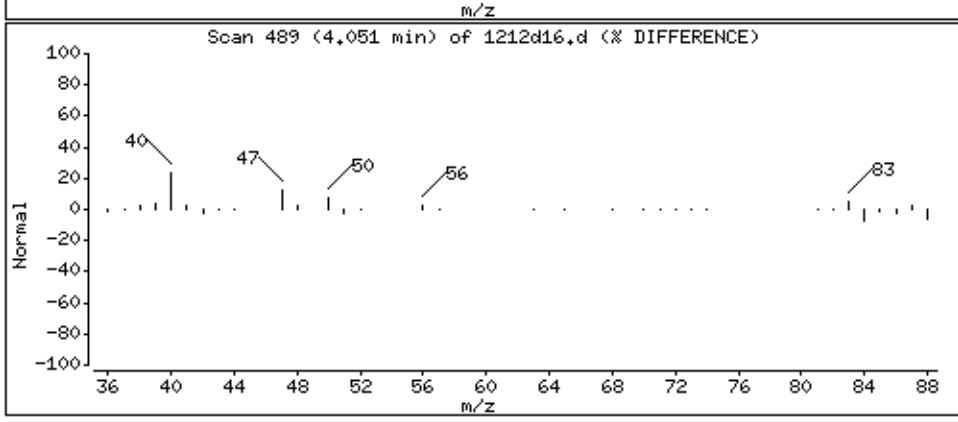
13 Methylene Chloride

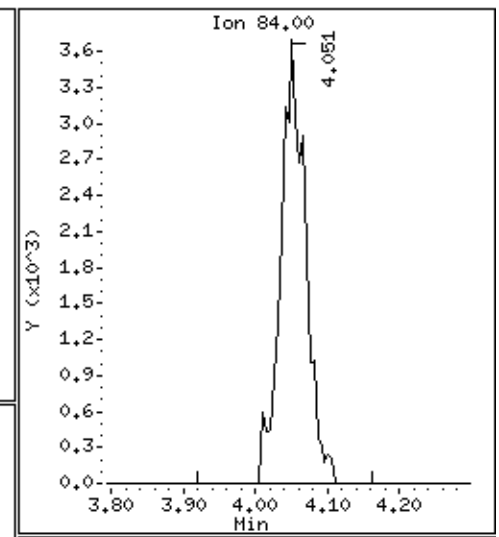
Concentration: 1.60 ug/L

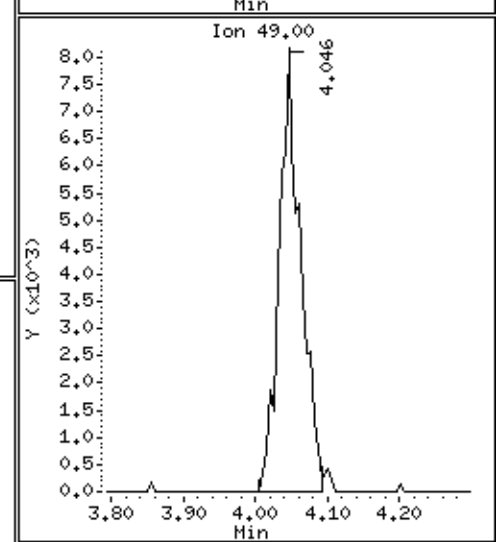


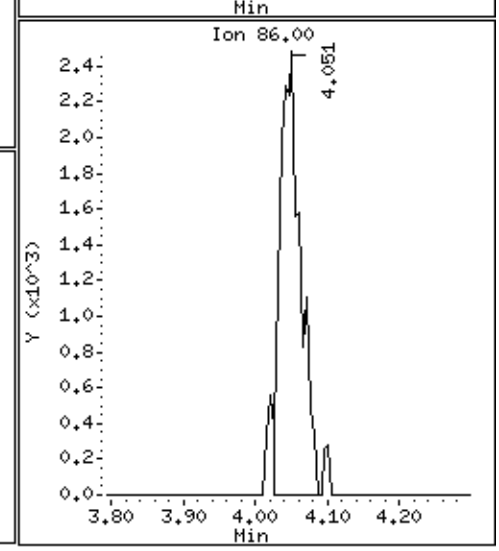












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d16.d

Date : 12-DEC-2017 13:11

Client ID: EB-20171204

Instrument: 20msvd.i

Sample Info: 2066645002

Purge Volume: 5.0

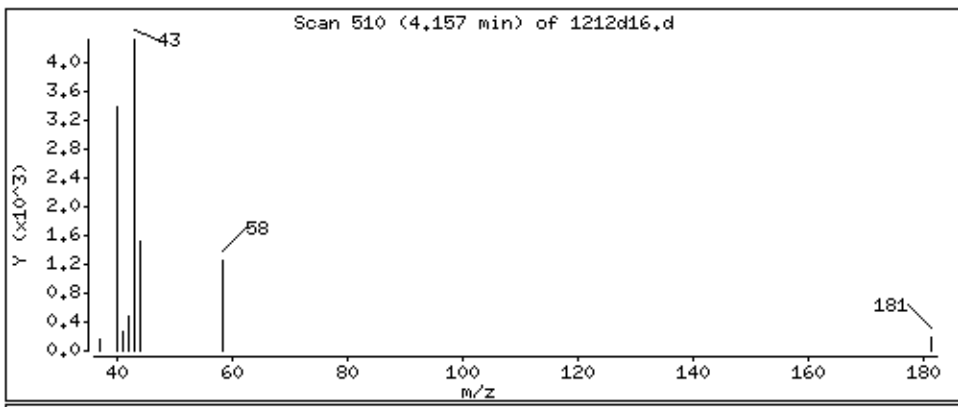
Operator: GEM

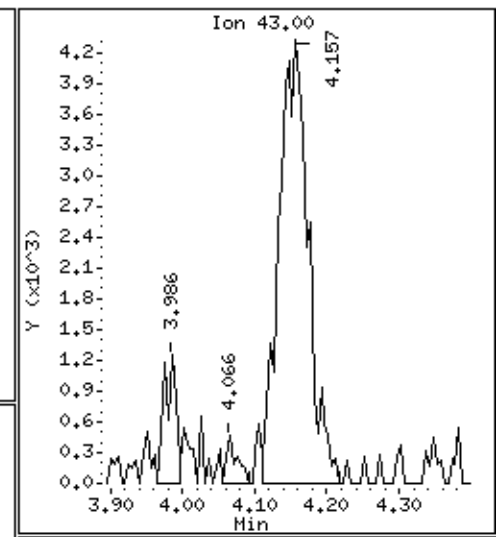
Column phase: RTX VMS 30m

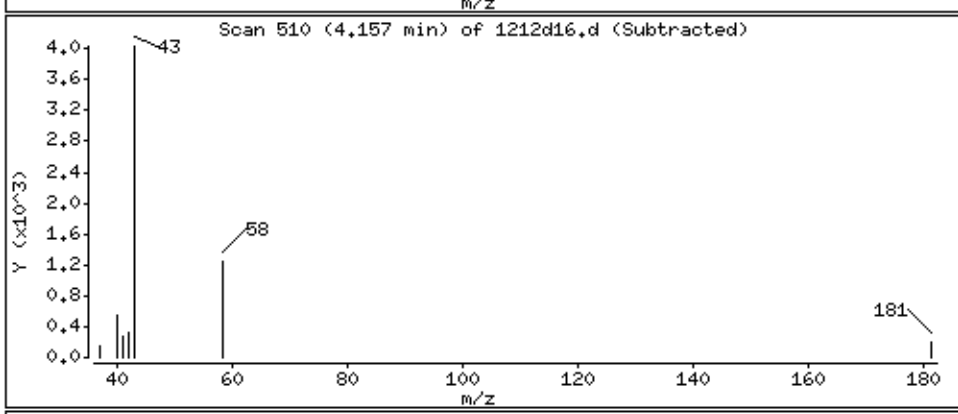
Column diameter: 0.25

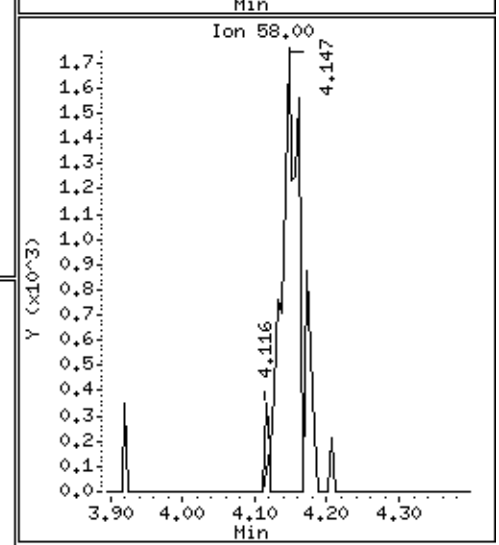
14 Acetone

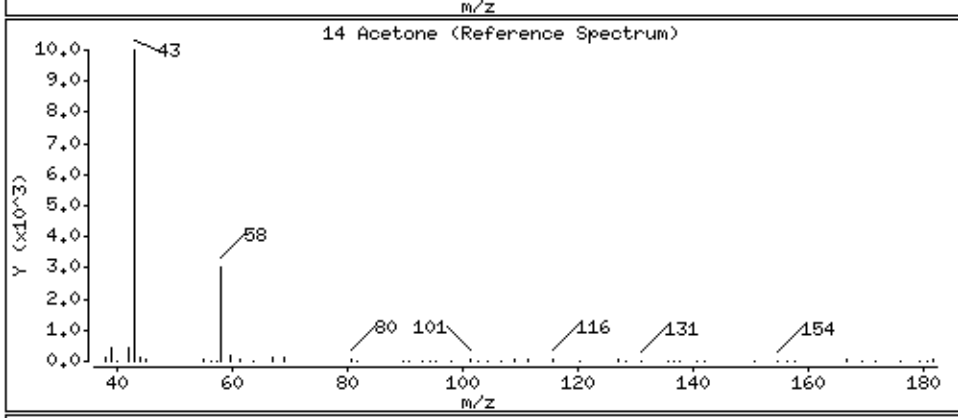
Concentration: 7.99 ug/L

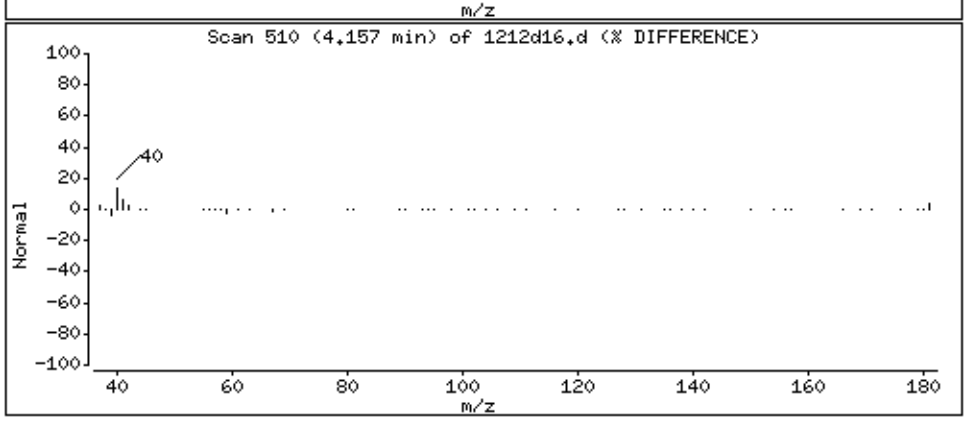












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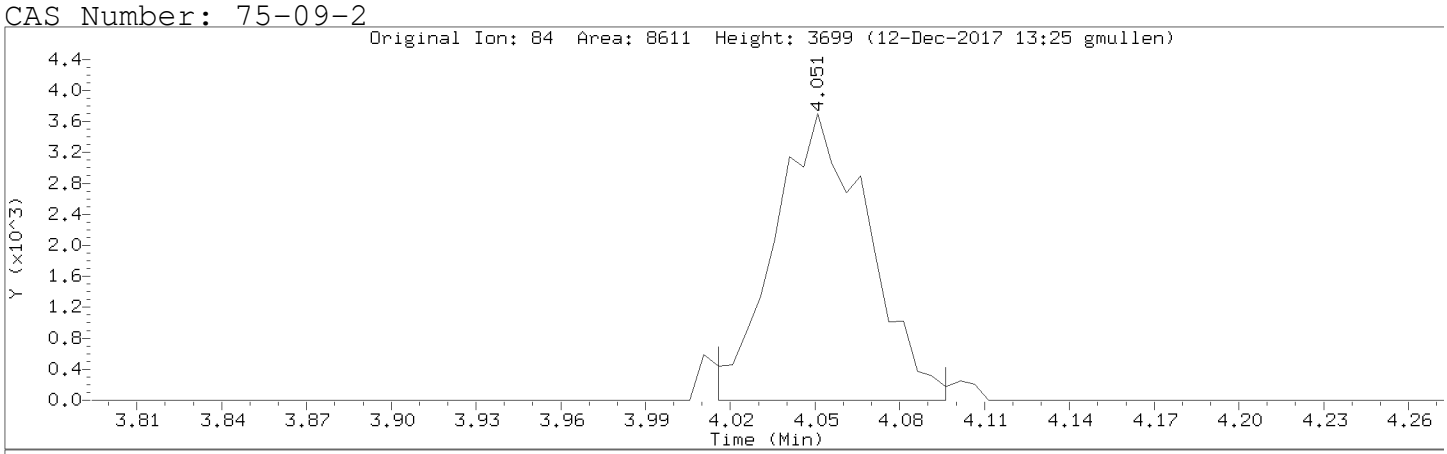
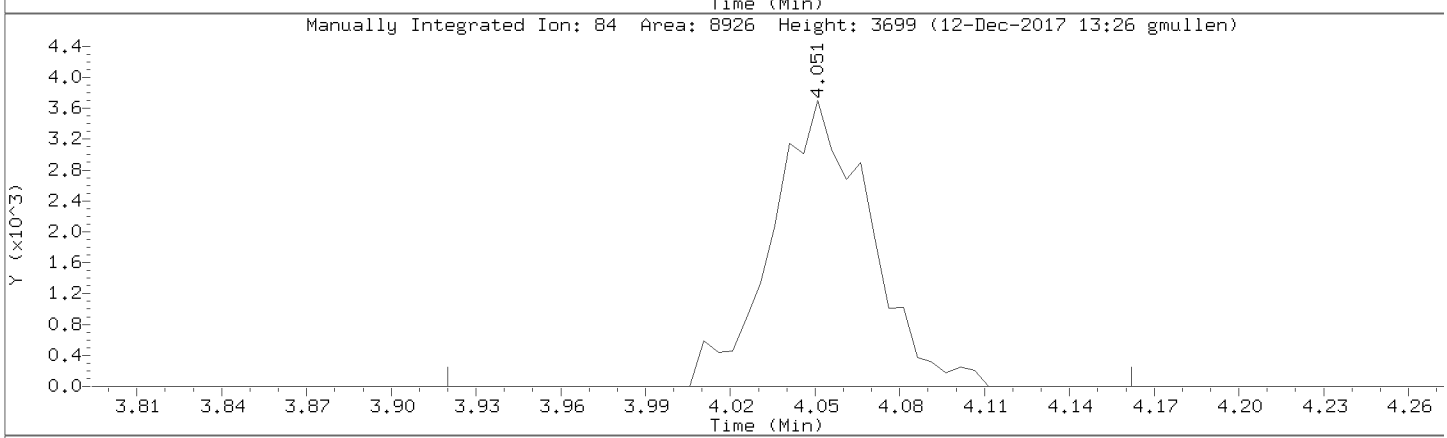
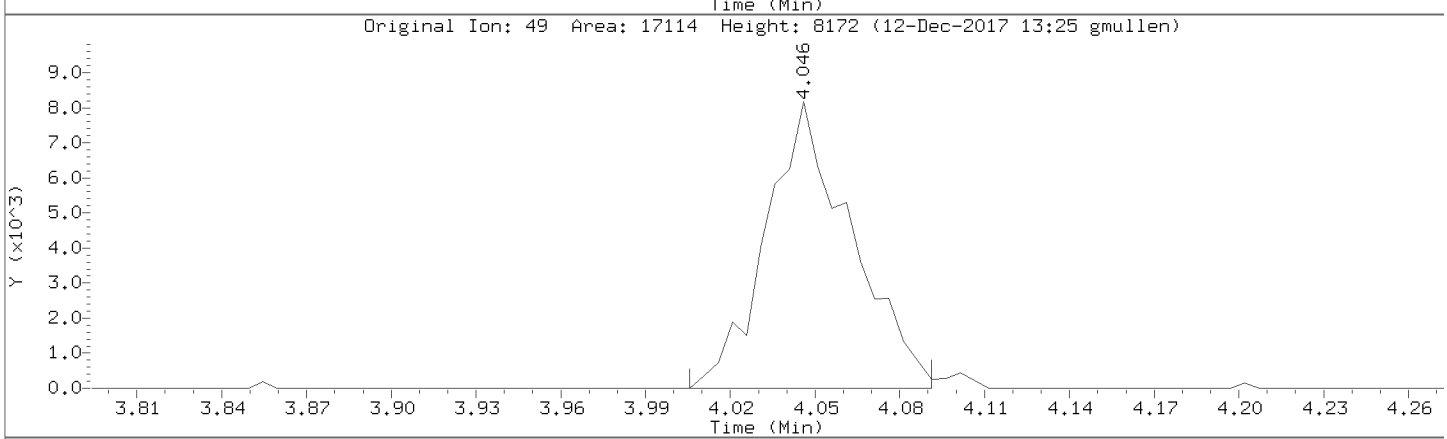
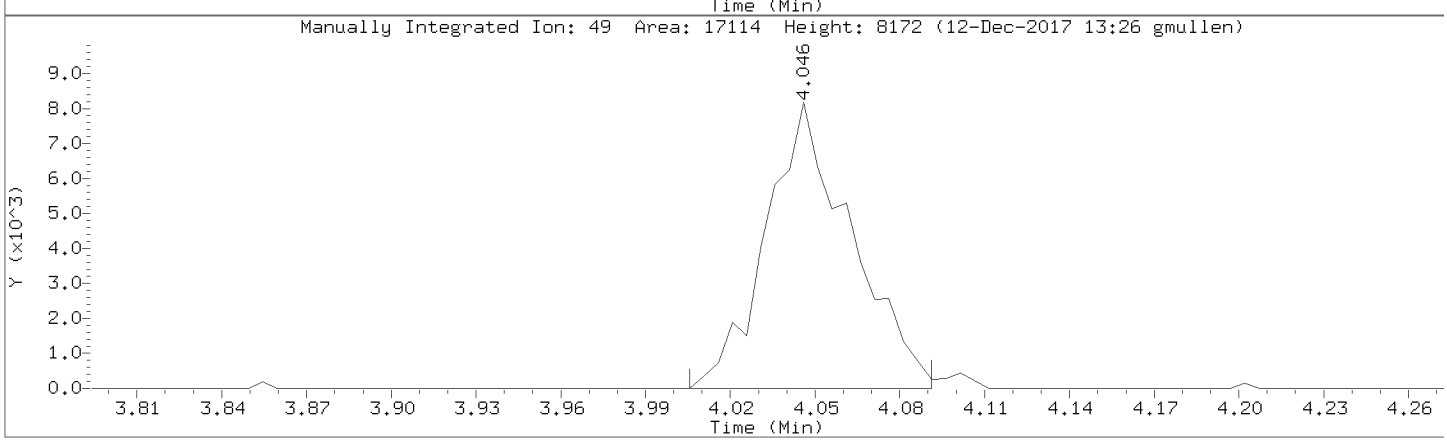
Injection Date: 12-DEC-2017 13:11
Instrument: 20msvd.i
Lab Sample ID: 2066645002

Compound: Methylene Chloride Review Code: LT
CAS Number: 75-09-2

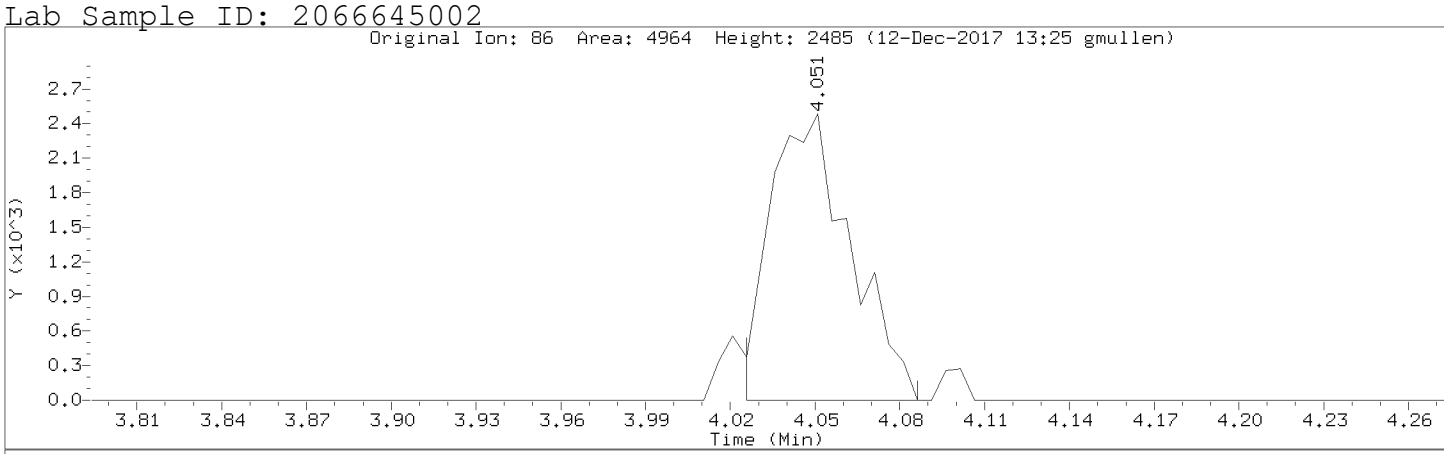


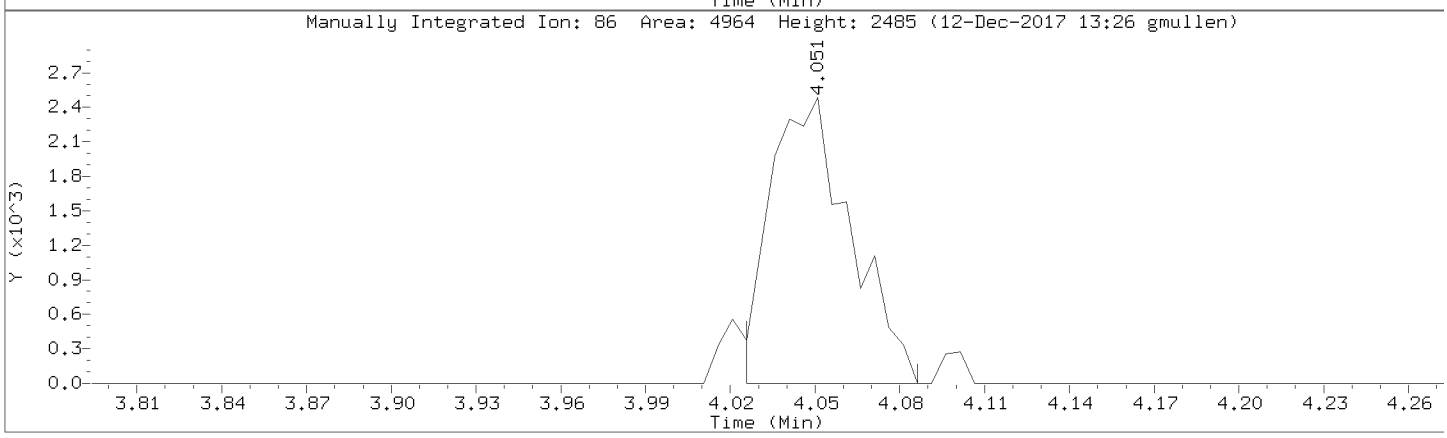






Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d16.d
Injection Date: 12-DEC-2017 13:11
Instrument: 20msvd.i
Lab Sample ID: 2066645002





Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d16.d

Page 2

Date : 12-DEC-2017 13:11

Client ID: EB-20171204

Instrument: 20msvd.i

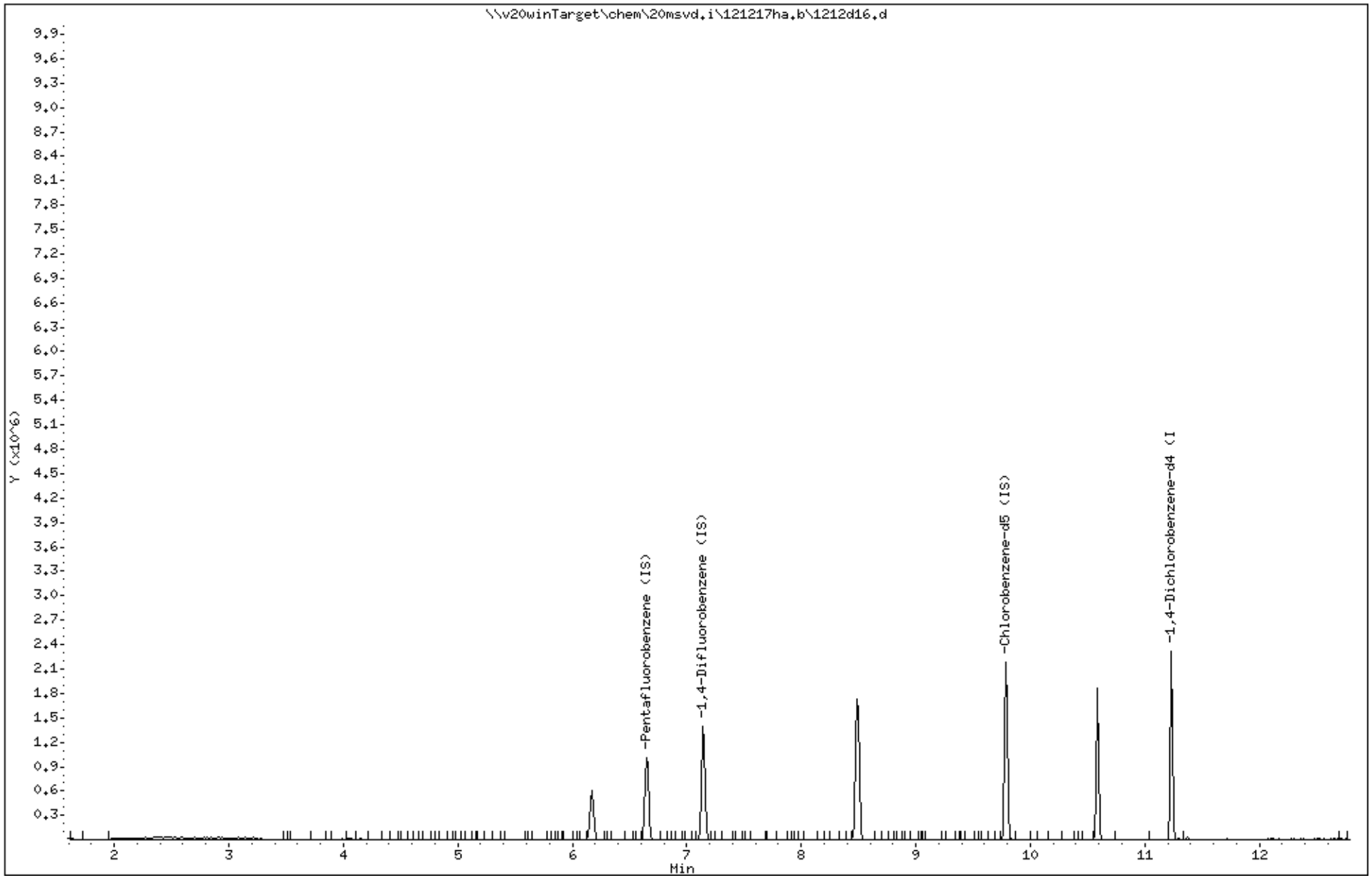
Sample Info: 2066645002

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d16.d
Injection Date: 12-DEC-2017 13:11
Instrument: 20msvd.i
Lab Sample ID: 2066645002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

FB-20171204

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:29
Lab Sample ID: 2066645003
Date Analyzed: 12/12/2017 13:29
Lab File ID: 121217.B\1212D17.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	5.5	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

FB-20171204

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:29
Lab Sample ID: 2066645003
Date Analyzed: 12/12/2017 13:29
Lab File ID: 121217.B\1212D17.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

FB-20171204

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:29
Lab Sample ID: 2066645003
Date Analyzed: 12/12/2017 13:29
Lab File ID: 121217HA.B\1212D17.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d17.d
Lab Smp Id: 2066645003 Client Smp ID: FB-20171204
Inj Date : 12-DEC-2017 13:29
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645003
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	4.040	4.045	(0.608)	6543	1.29697	1.30(M)	
14 Acetone	43	4.146	4.146	(0.624)	7790	5.48526	5.48(M)	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	310448	49.9867	50.0	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						(D
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	282106	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						(D
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	927754	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1027705	49.5084	49.5	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	383046	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.589	10.584	(0.943)	379494	49.8867	49.9	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
	77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
	79 4-Chlorotoluene	91	Compound Not Detected.						
	80 tert-Butylbenzene	91	Compound Not Detected.						
	81 Pentachloroethane	167	Compound Not Detected.						
	82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	83 sec-Butylbenzene	105	Compound Not Detected.						
	84 p-Isopropyltoluene	119	Compound Not Detected.						
	85 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	384678	50.0000		
	87 1,4-Dichlorobenzene	146	Compound Not Detected.						
	88 n-Butylbenzene	91	Compound Not Detected.						(D
	89 1,2-Dichlorobenzene	146	Compound Not Detected.						
	90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
	91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	93 Naphthalene	128	Compound Not Detected.						
	94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d17.d
Lab Smp Id: 2066645003 Client Smp ID: FB-20171204
Inj Date : 12-DEC-2017 13:29
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645003
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	282106	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	927754	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	383046	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	384678	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d17.d

Date : 12-DEC-2017 13:29

Client ID: FB-20171204

Instrument: 20msvd.i

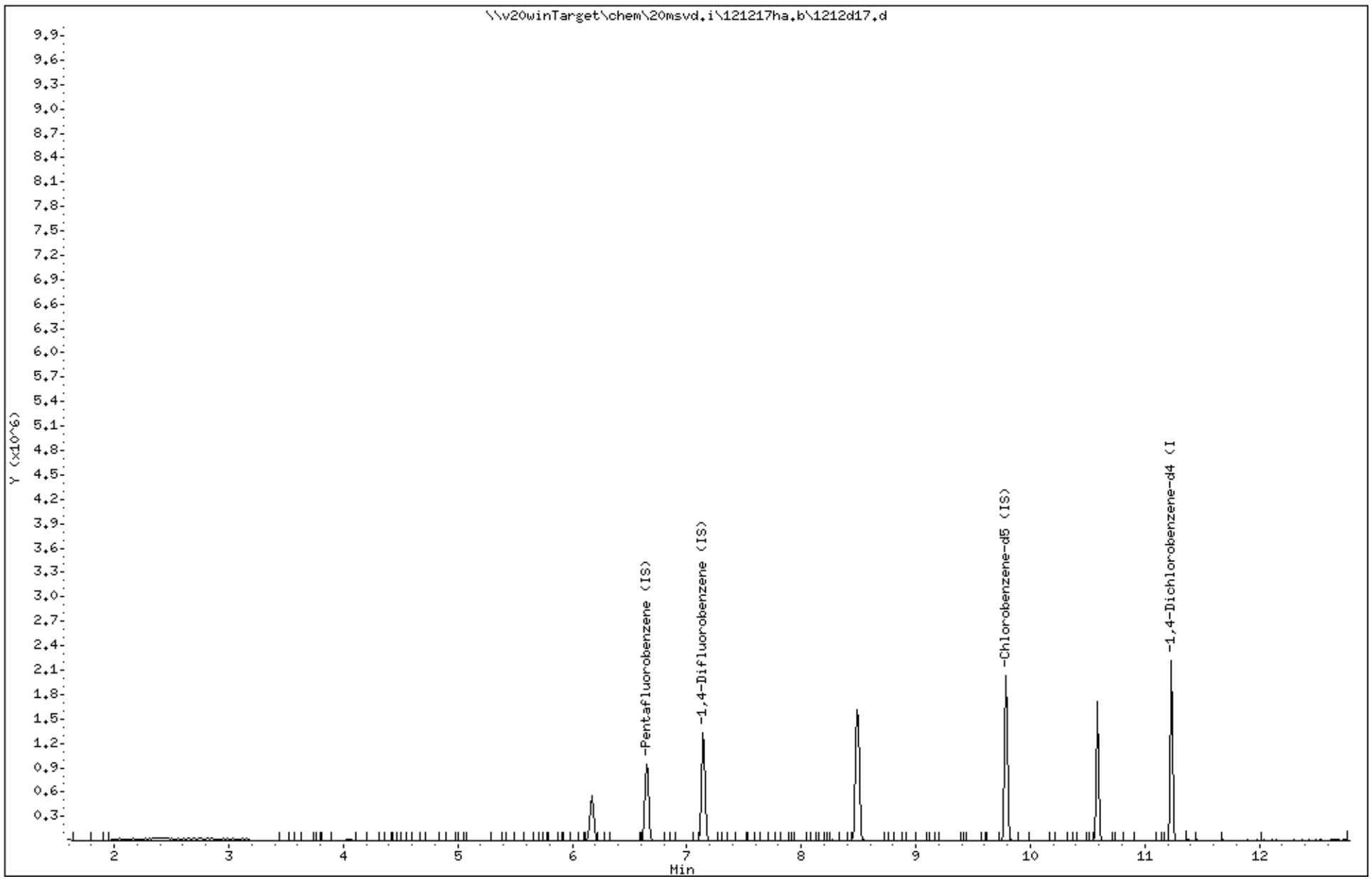
Sample Info: 2066645003

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



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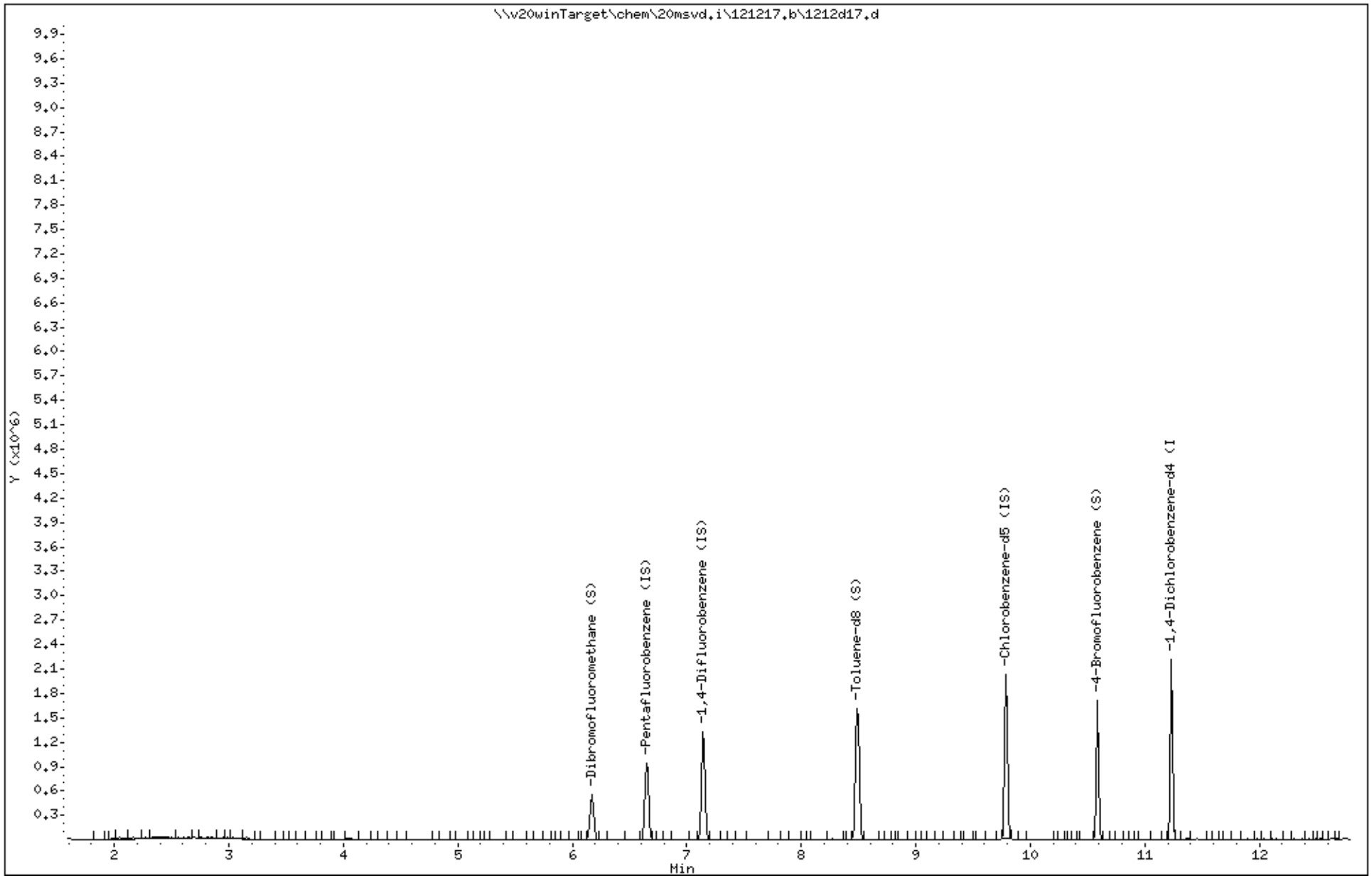
Injection Date: 12-DEC-2017 13:29
Instrument: 20msvd.i
Lab Sample ID: 2066645003
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d17.d
Date : 12-DEC-2017 13:29
Client ID: FB-20171204
Sample Info: 2066645003
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



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Date : 12-DEC-2017 13:29

Client ID: FB-20171204

Instrument: 20msvd.i

Sample Info: 2066645003

Purge Volume: 5.0

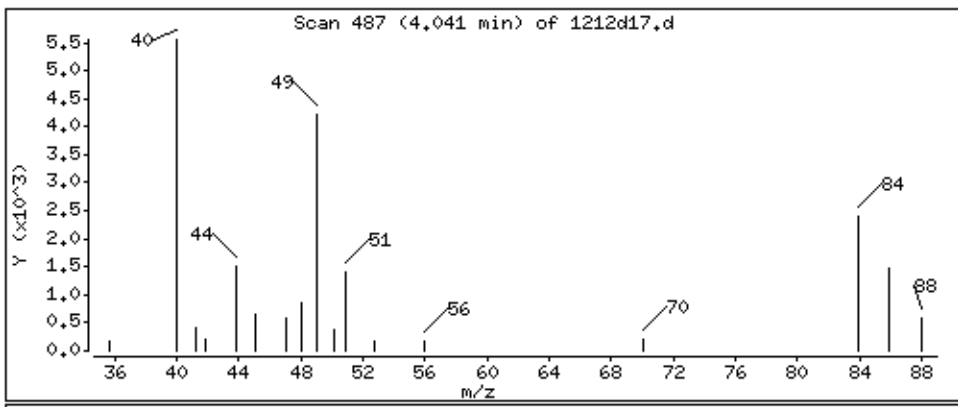
Operator: GEM

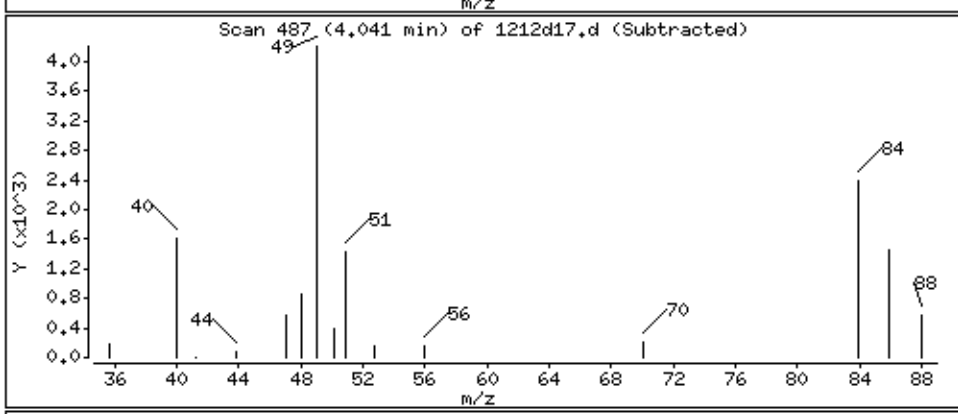
Column phase: RTX VMS 30m

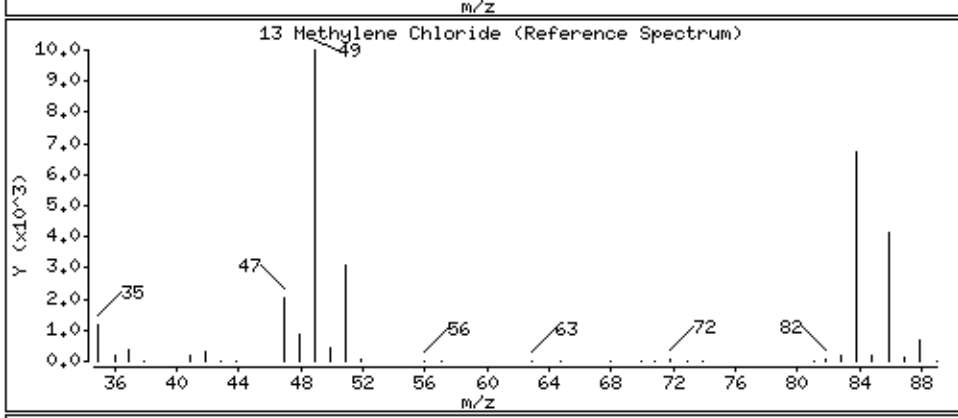
Column diameter: 0.25

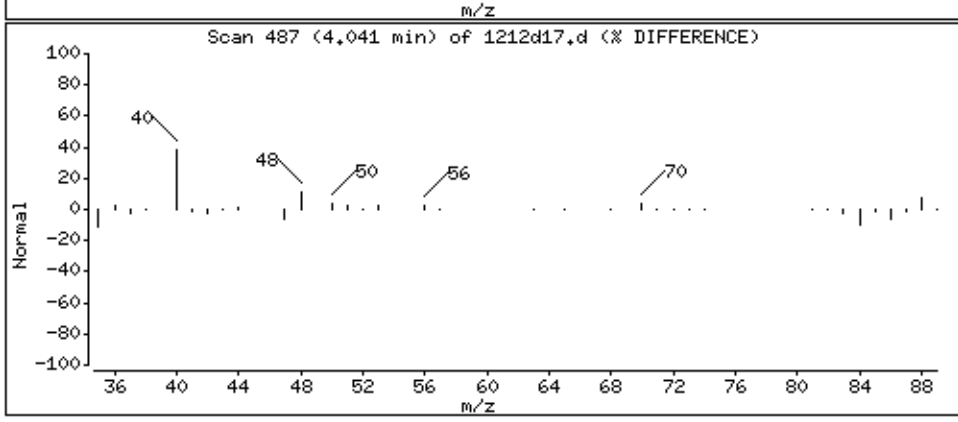
13 Methylene Chloride

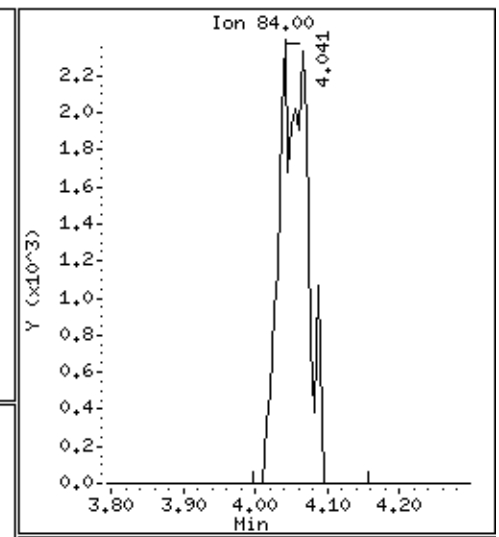
Concentration: 1.30 ug/L

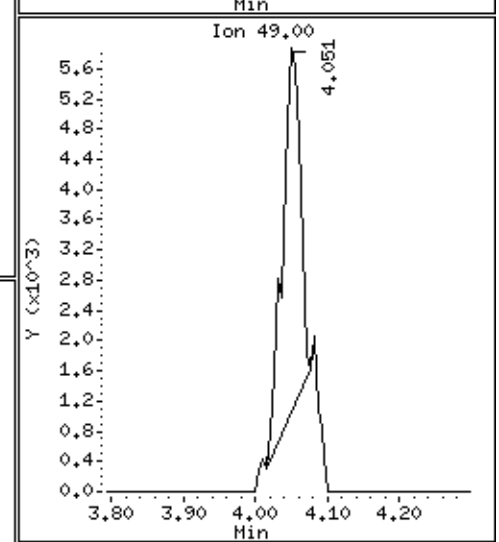


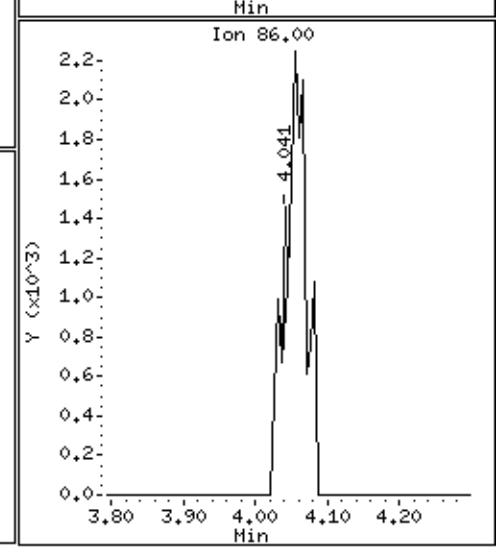












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Date : 12-DEC-2017 13:29

Client ID: FB-20171204

Instrument: 20msvd.i

Sample Info: 2066645003

Purge Volume: 5.0

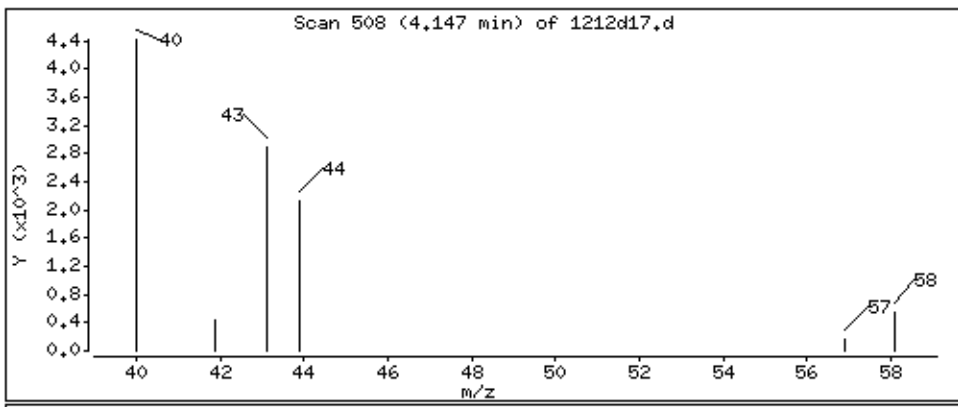
Operator: GEM

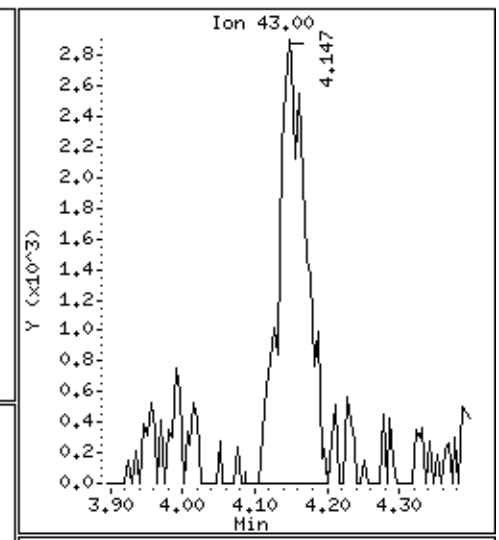
Column phase: RTX VMS 30m

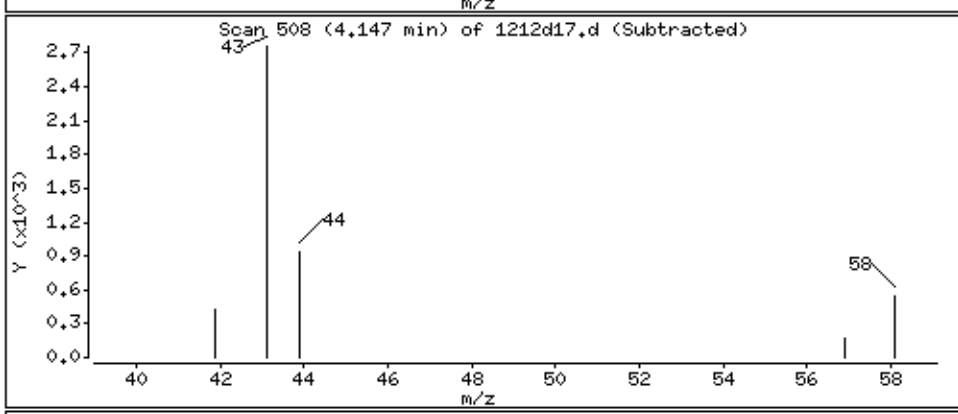
Column diameter: 0.25

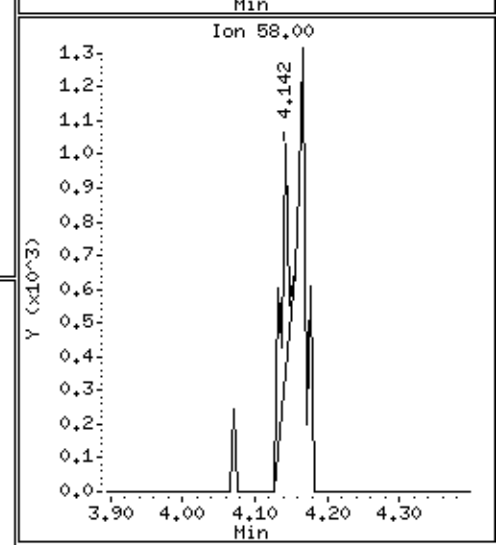
14 Acetone

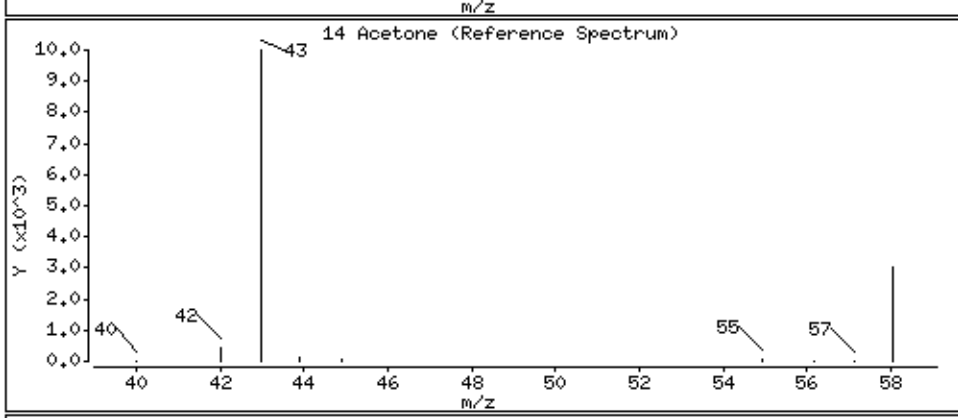
Concentration: 5.48 ug/L

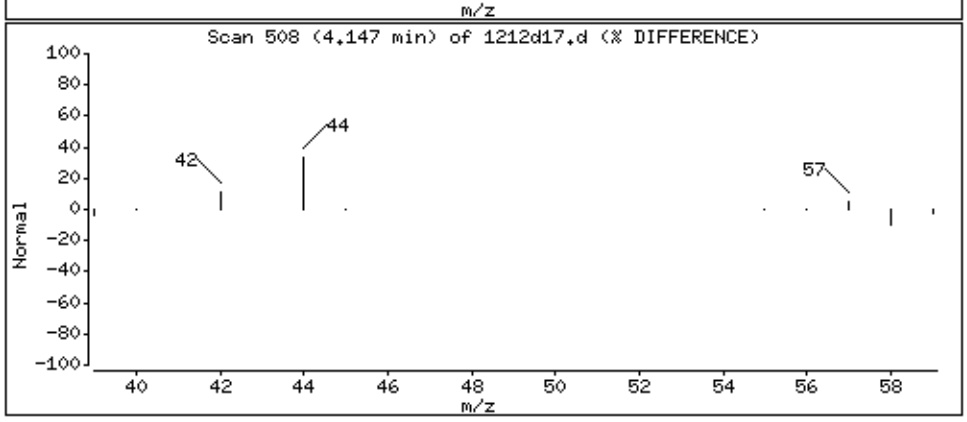












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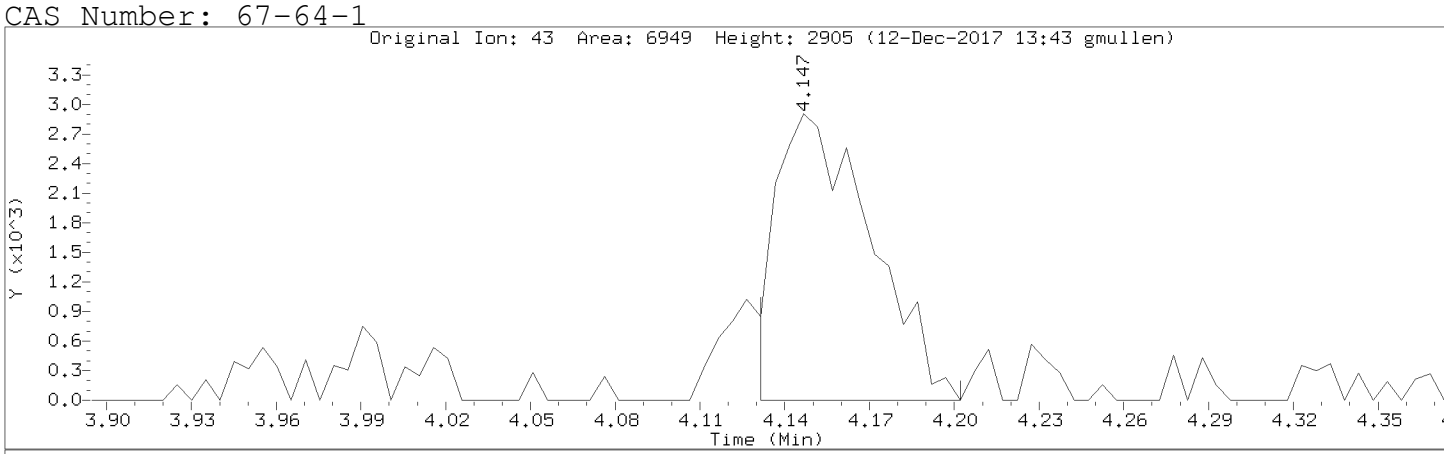
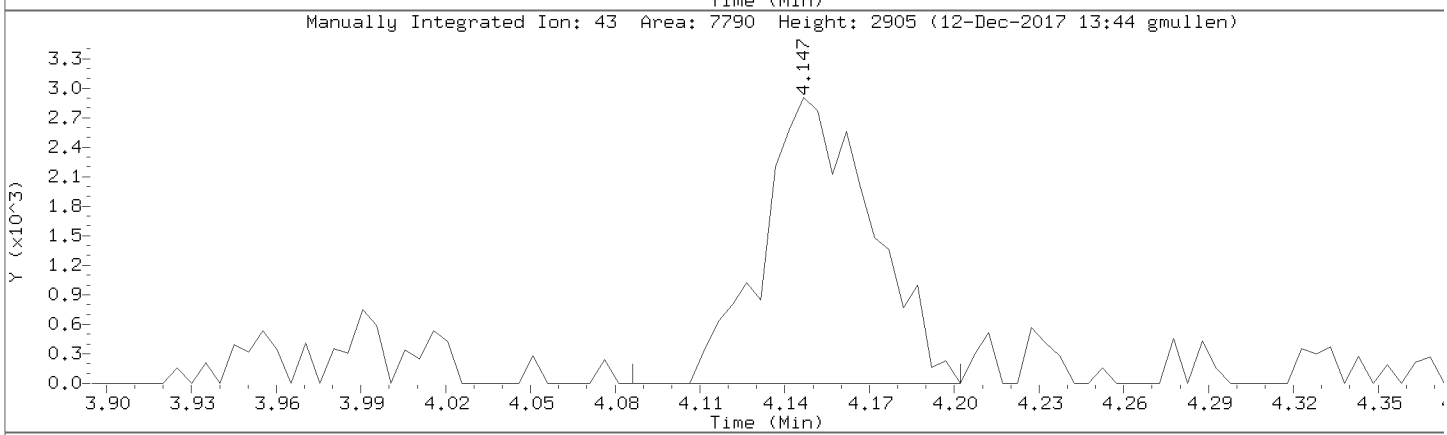
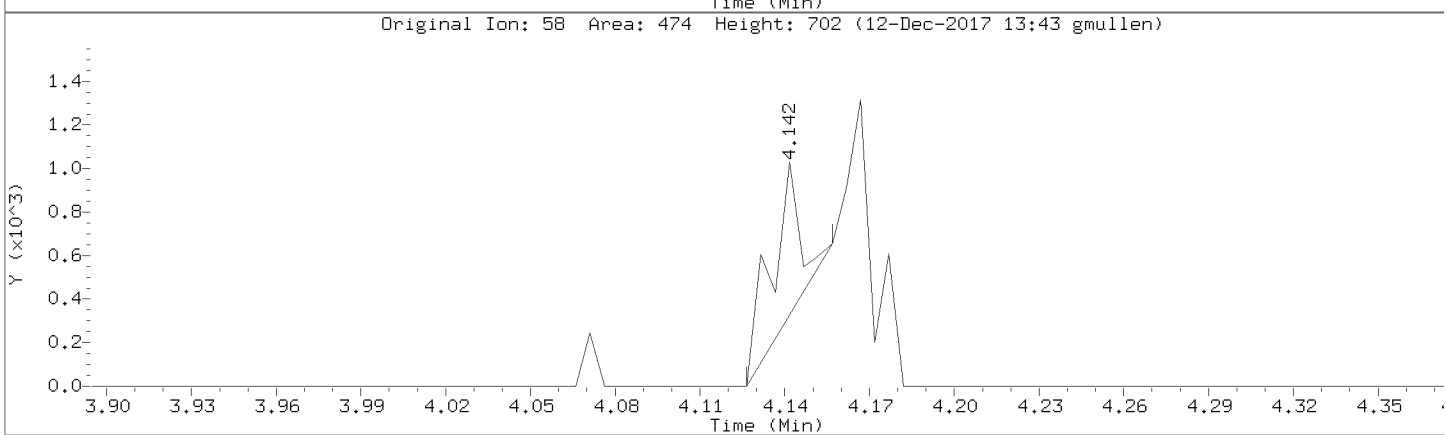
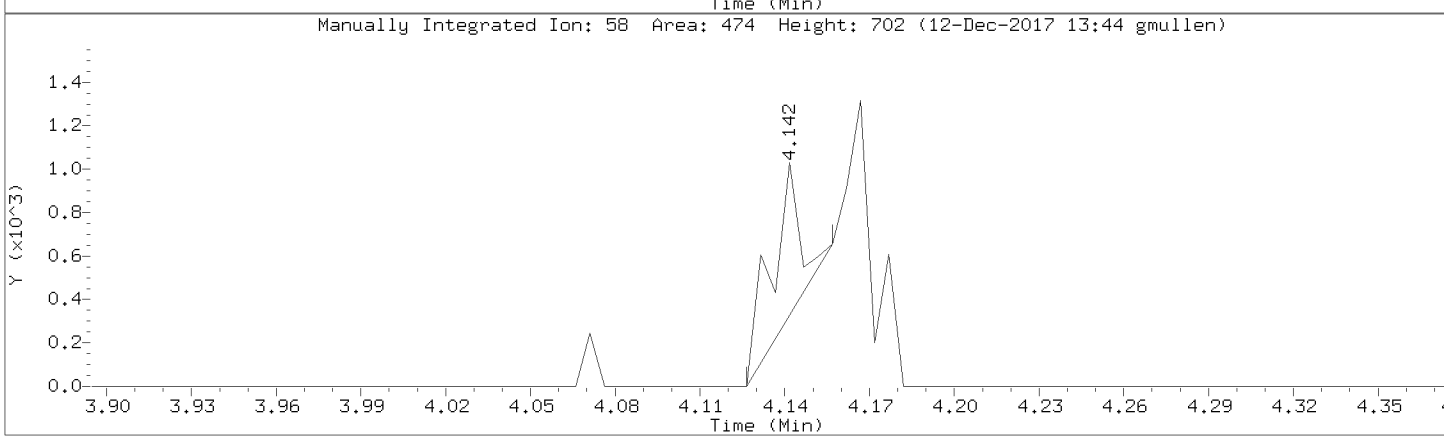
Injection Date: 12-DEC-2017 13:29
Instrument: 20msvd.i
Lab Sample ID: 2066645003

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









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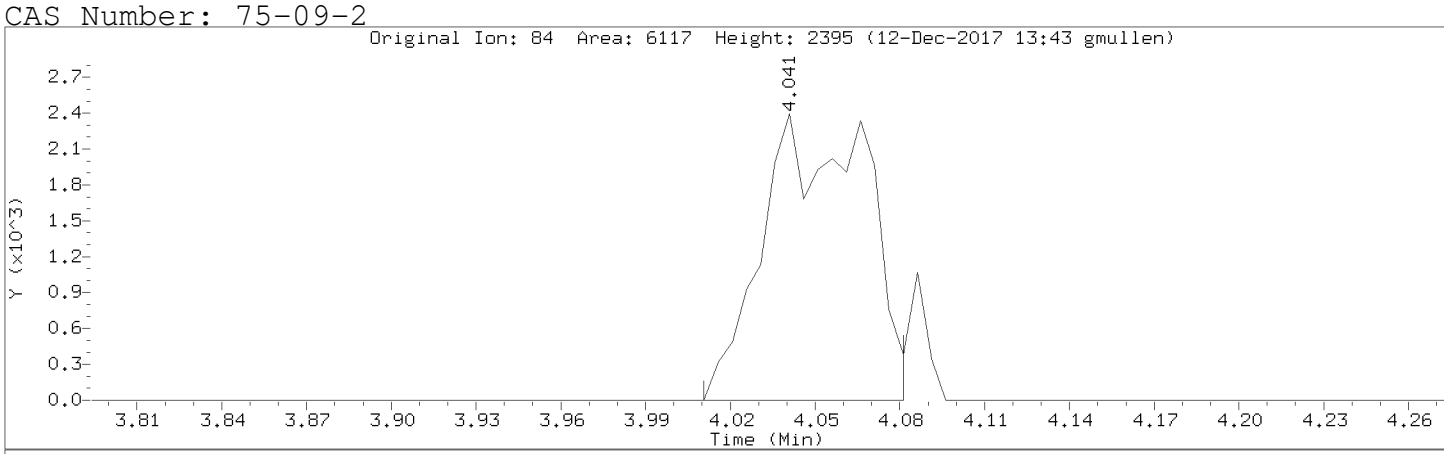
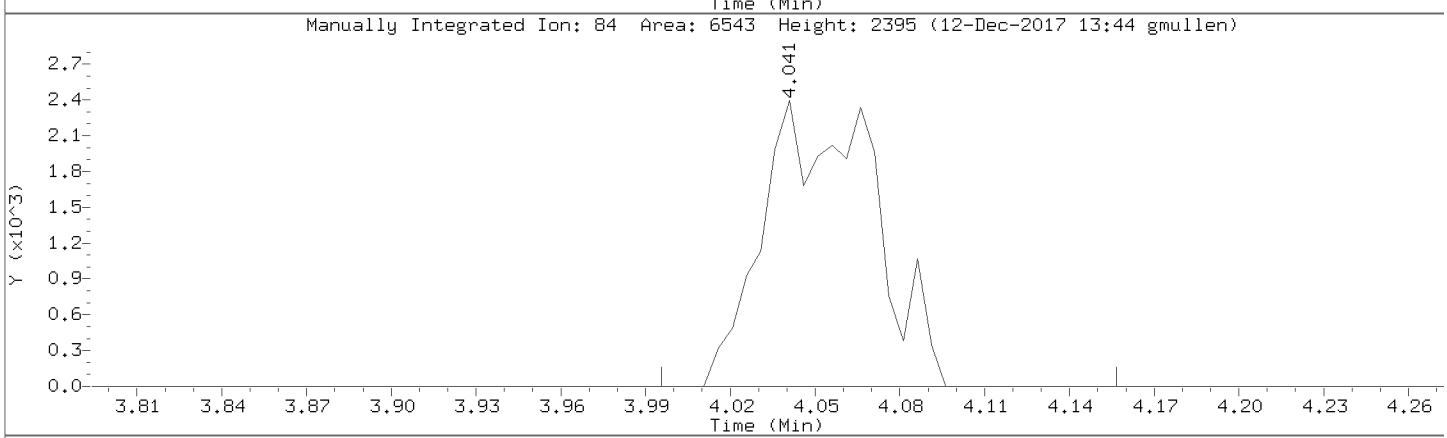
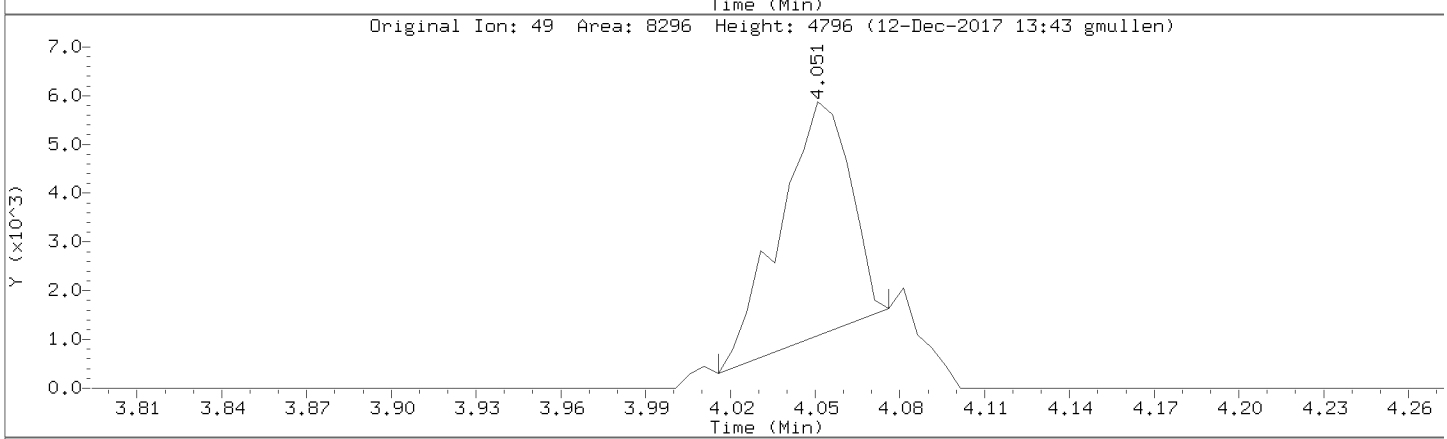
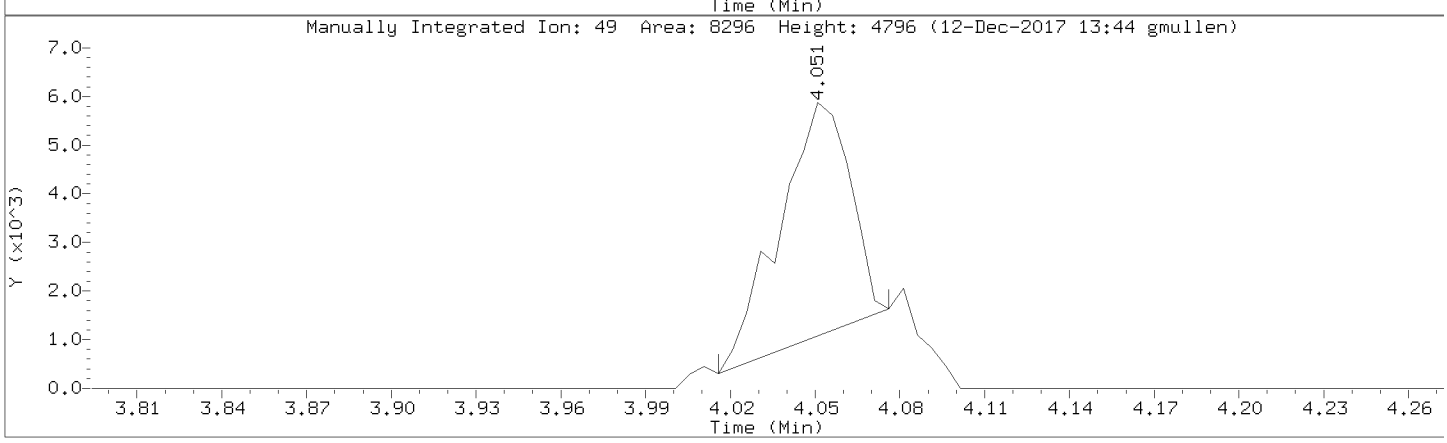
Injection Date: 12-DEC-2017 13:29
Instrument: 20msvd.i
Lab Sample ID: 2066645003

Compound: Methylene Chloride Review Code: LT
CAS Number: 75-09-2









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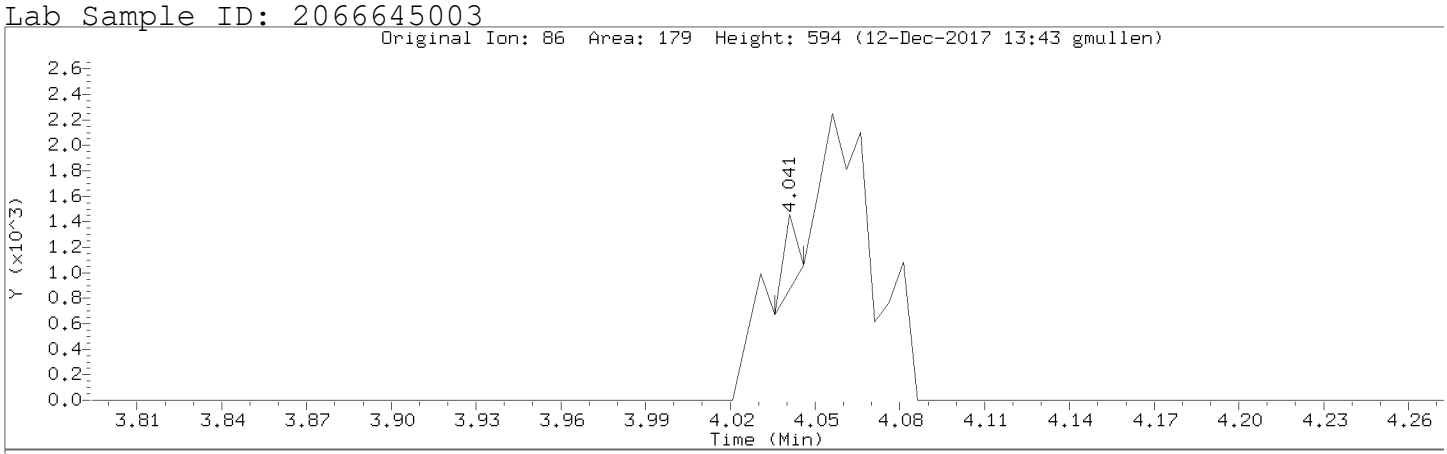
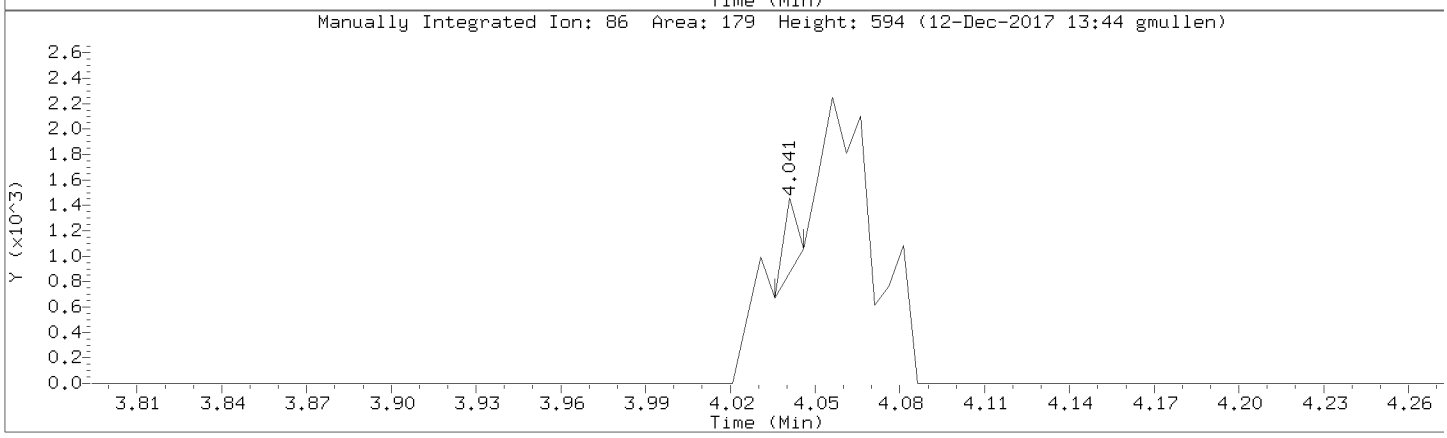
Injection Date: 12-DEC-2017 13:29
Instrument: 20msvd.i
Lab Sample ID: 2066645003





SAMPLE NO.

MW-1A-3-BP

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:47
Lab Sample ID: 2066645004
Date Analyzed: 12/12/2017 13:47
Lab File ID: 121217.B\1212D18.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	1.8	
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-1A-3-BP

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:47
Lab Sample ID: 2066645004
Date Analyzed: 12/12/2017 13:47
Lab File ID: 121217.B\1212D18.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MW-1A-3-BP

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 13:47
Lab Sample ID: 2066645004
Date Analyzed: 12/12/2017 13:47
Lab File ID: 121217HA.B\1212D18.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	1.9	
	Haloether 229	4.3	
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	54.7	
	Haloether 528	1.3	
	Halomar	1.0	
	Isoflurane	19.3	
76-38-0	Methoxyflurane	ND	U
	Total Haloether	82.5	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d18.d
Lab Smp Id: 2066645004 Client Smp ID: MW-1A-3-BP
Inj Date : 12-DEC-2017 13:47
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645004
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	2.237	2.237	(0.336)	19868	4.31644	4.32
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	4.338	4.333	(0.652)	50032	19.2601	19.3(M)
4 Haloether 508	97	4.353	4.358	(0.655)	130978	54.6681	54.7(M)
5 Enflurane	117	4.579	4.584	(0.689)	9962	1.87323	1.87(M)
6 Halomar	81	5.355	5.365	(0.805)	12060	1.03541	1.04
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	290158	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	922412	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	9.516	9.511	(1.332)	18810	1.34336	1.34
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	392063	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	378139	50.0000	

QC Flag Legend

M - Compound response manually integrated.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d18.d
Lab Smp Id: 2066645004 Client Smp ID: MW-1A-3-BP
Inj Date : 12-DEC-2017 13:47
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645004
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.136	4.146	(0.622)	3615	2.42314	2.42(M)	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.166	6.171	(0.927)	320752	50.2126	50.2	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	290158	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						(D
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	922412	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1029675	49.8906	49.9	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	8.897	8.897	(0.909)	9303	1.78918	1.79	
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	392063	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	386506	51.6871	51.7	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D
	76 2-Chlorotoluene	91	Compound Not Detected.						

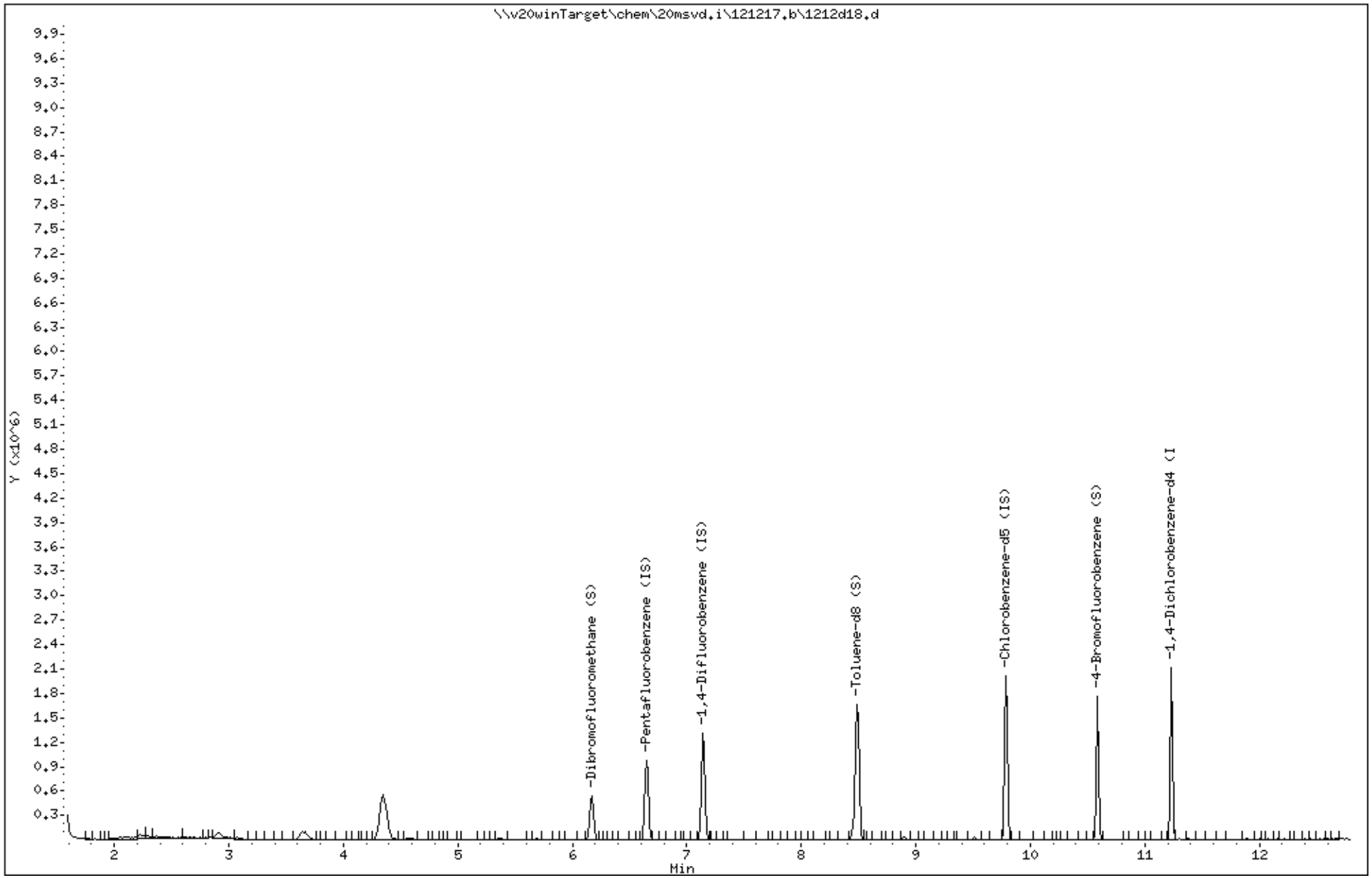
	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
	77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
	79 4-Chlorotoluene	91	Compound Not Detected.						
	80 tert-Butylbenzene	91	Compound Not Detected.						
	81 Pentachloroethane	167	Compound Not Detected.						
	82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	83 sec-Butylbenzene	105	Compound Not Detected.						
	84 p-Isopropyltoluene	119	Compound Not Detected.						
	85 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	378139	50.0000		
	87 1,4-Dichlorobenzene	146	Compound Not Detected.						
	88 n-Butylbenzene	91	Compound Not Detected.						(D
	89 1,2-Dichlorobenzene	146	Compound Not Detected.						
	90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
	91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						(D
	93 Naphthalene	128	Compound Not Detected.						
	94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d18.d
Date : 12-DEC-2017 13:47
Client ID: MW-1A-3-BP
Sample Info: 2066645004
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d18.d

Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

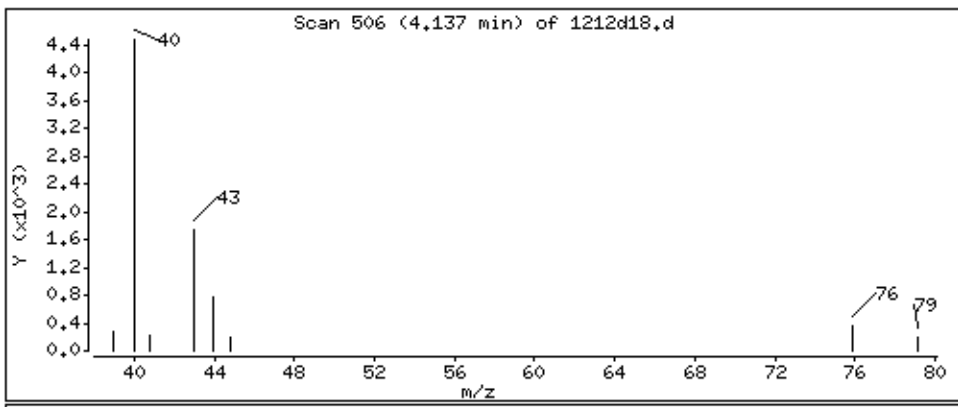
Operator: GEM

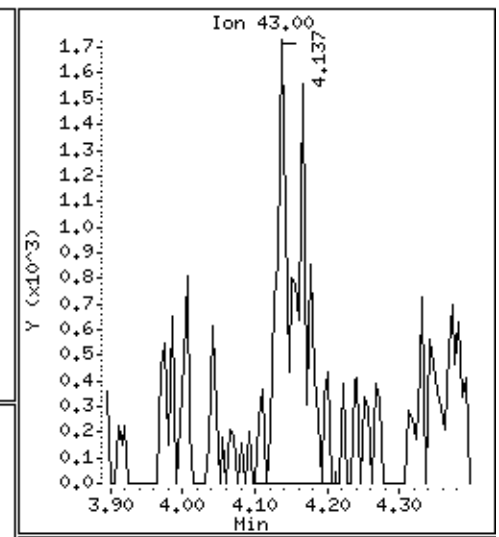
Column phase: RTX VMS 30m

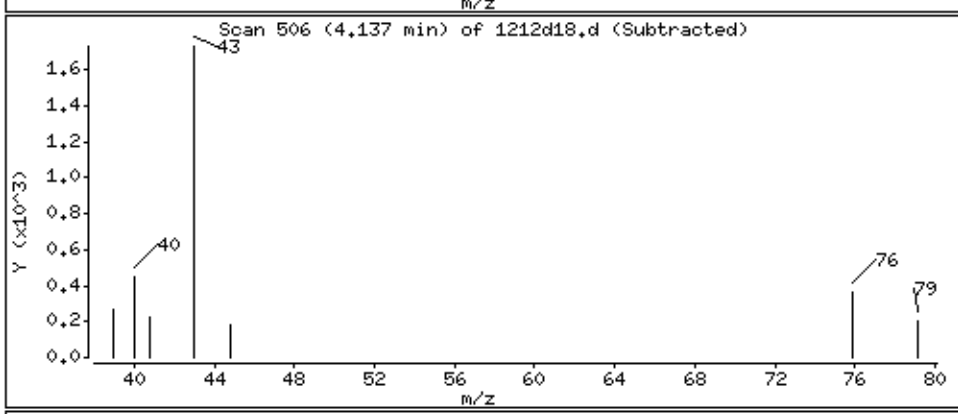
Column diameter: 0.25

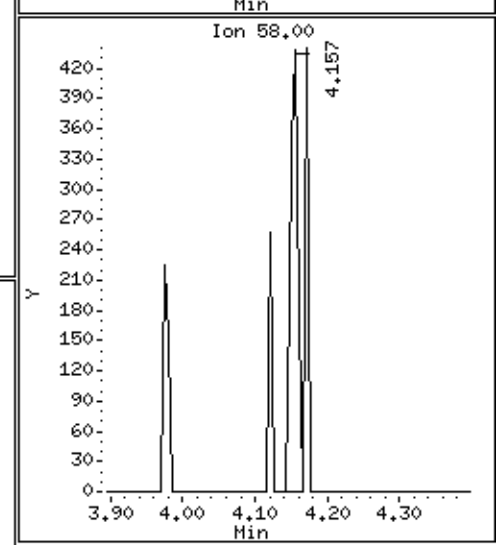
14 Acetone

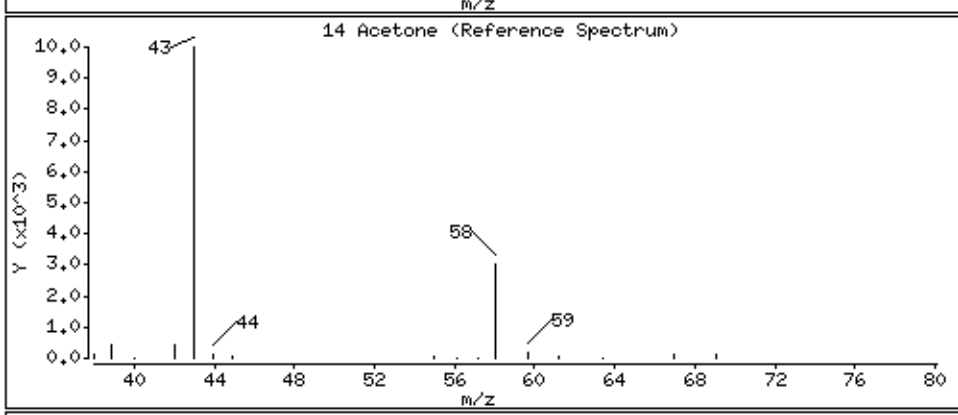
Concentration: 2.42 ug/L

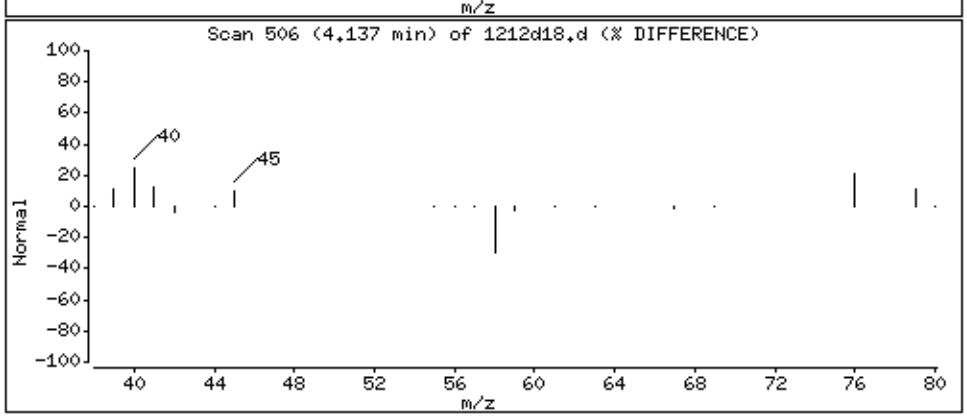












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Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

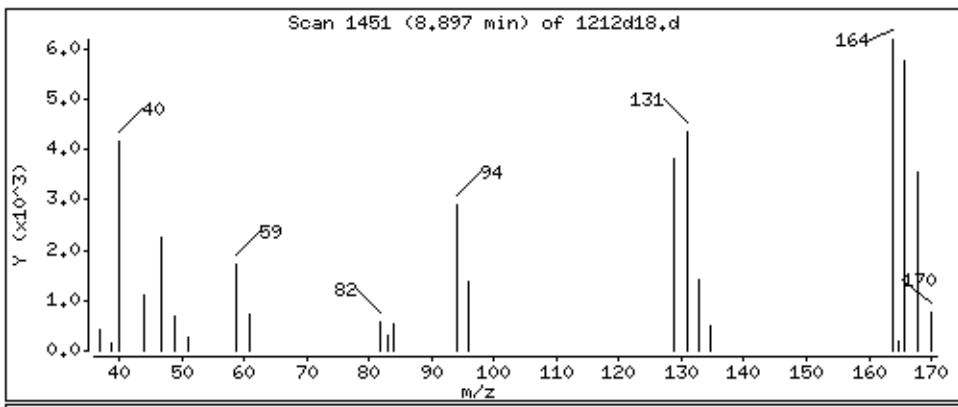
Operator: GEM

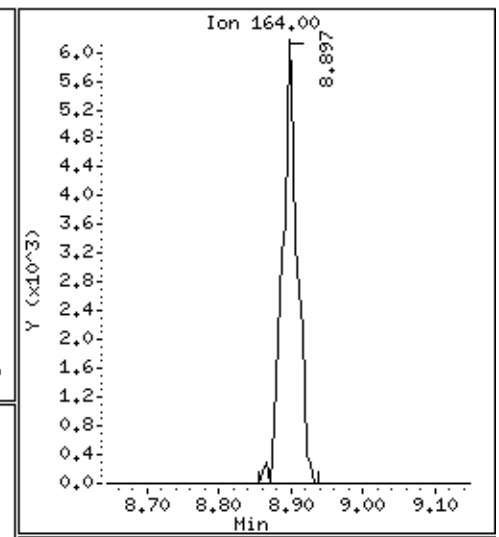
Column phase: RTX VMS 30m

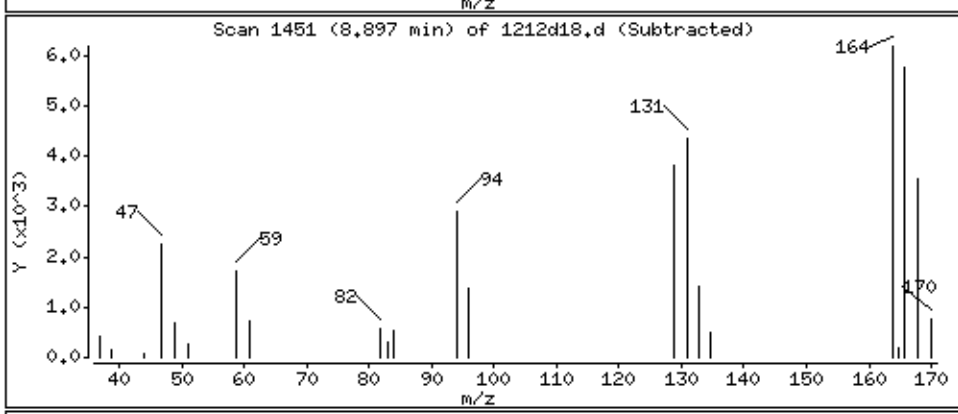
Column diameter: 0.25

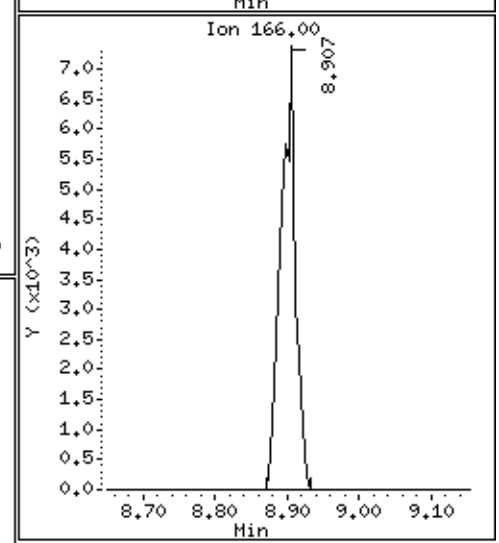
53 Tetrachloroethene

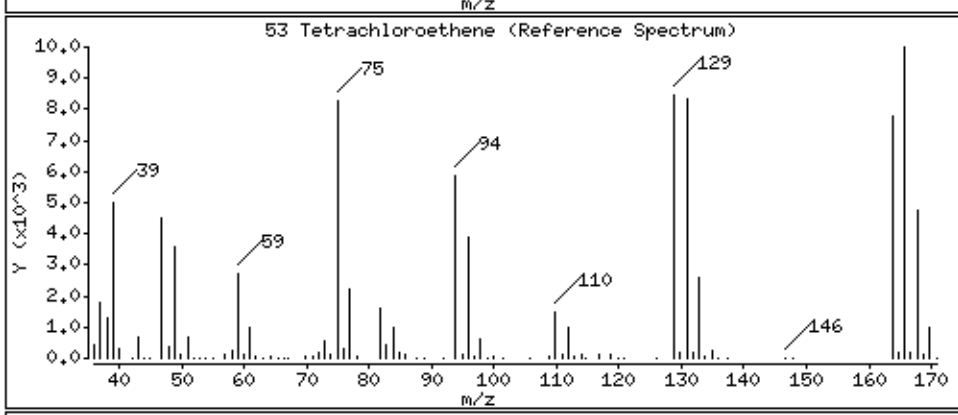
Concentration: 1.79 ug/L

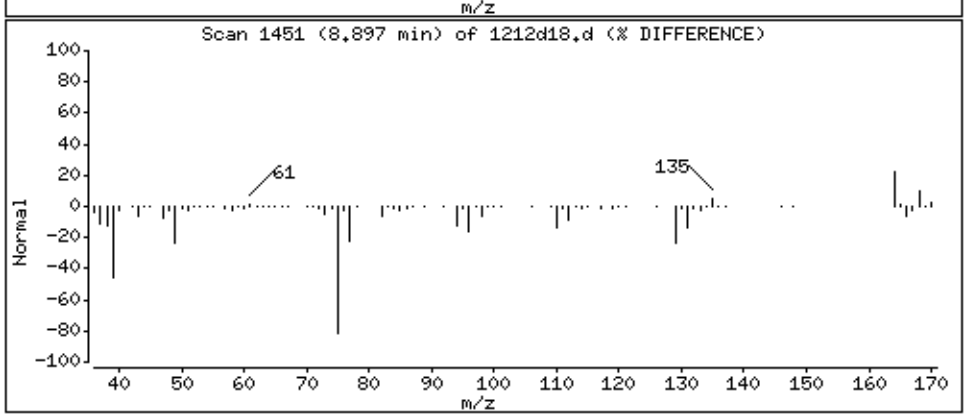












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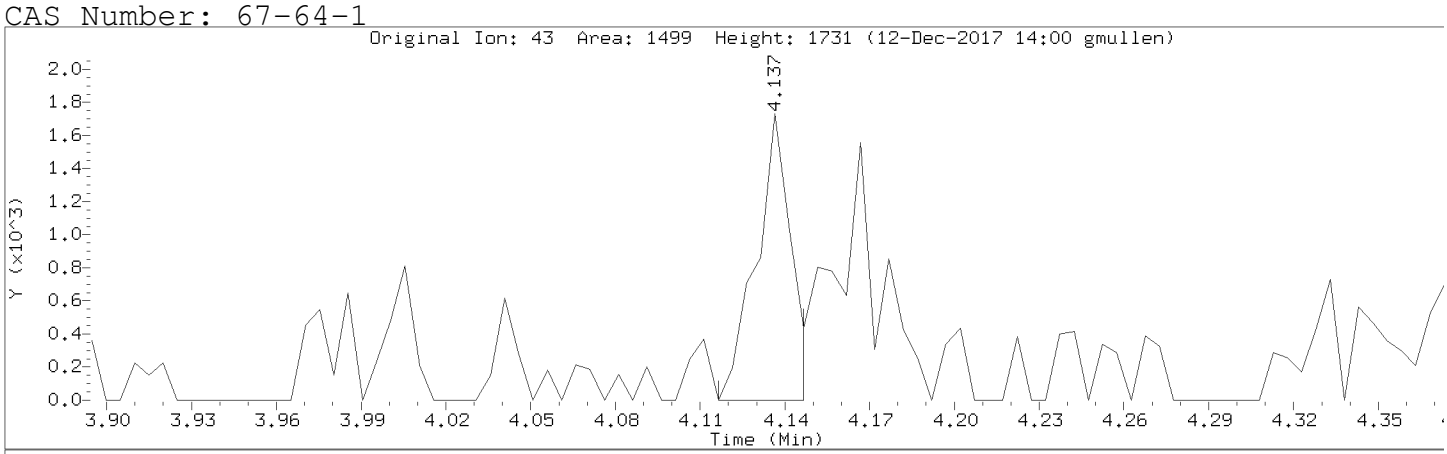
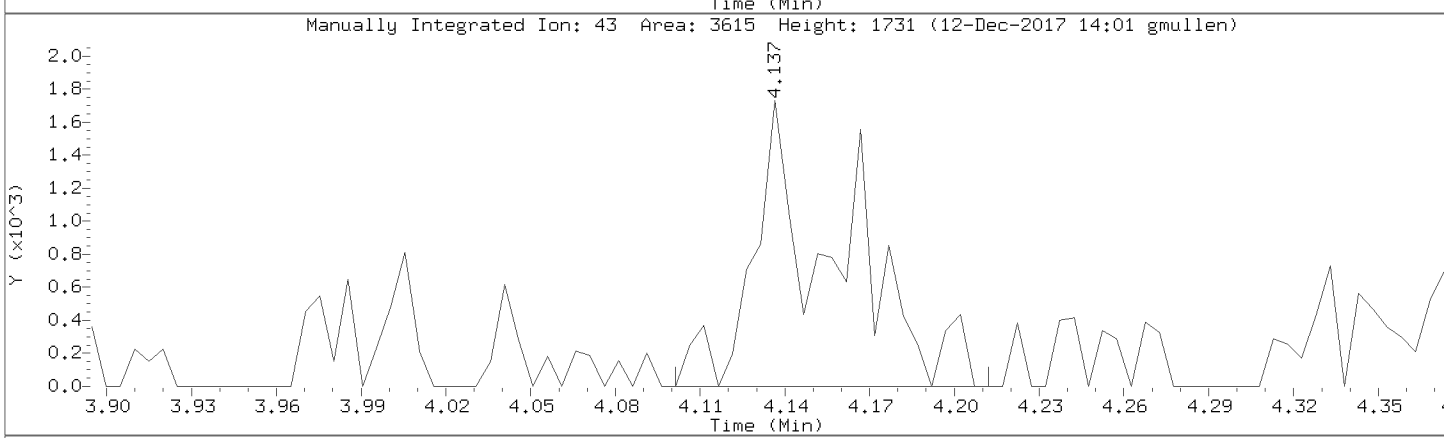
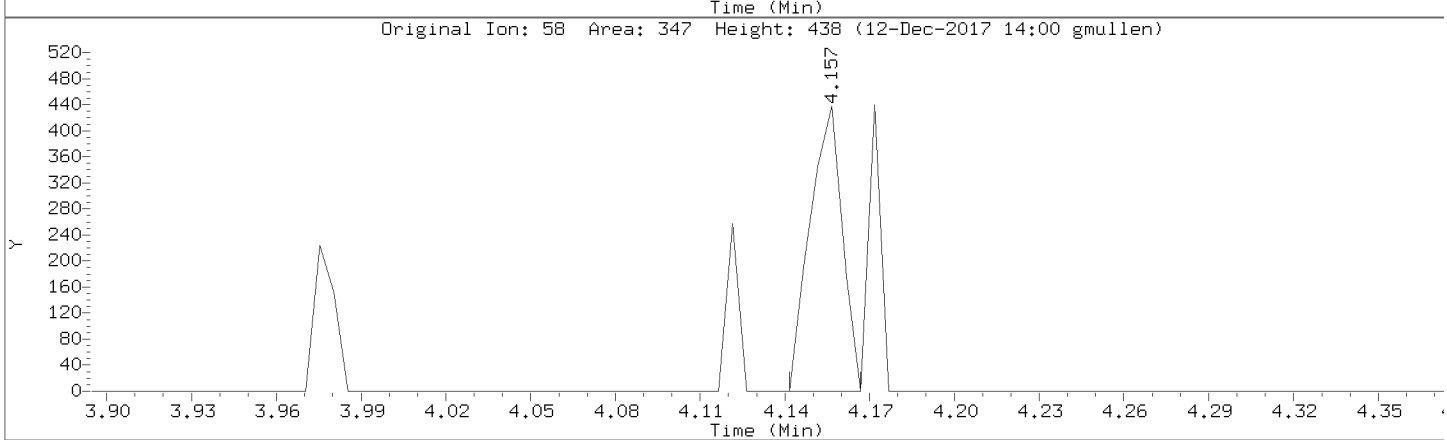
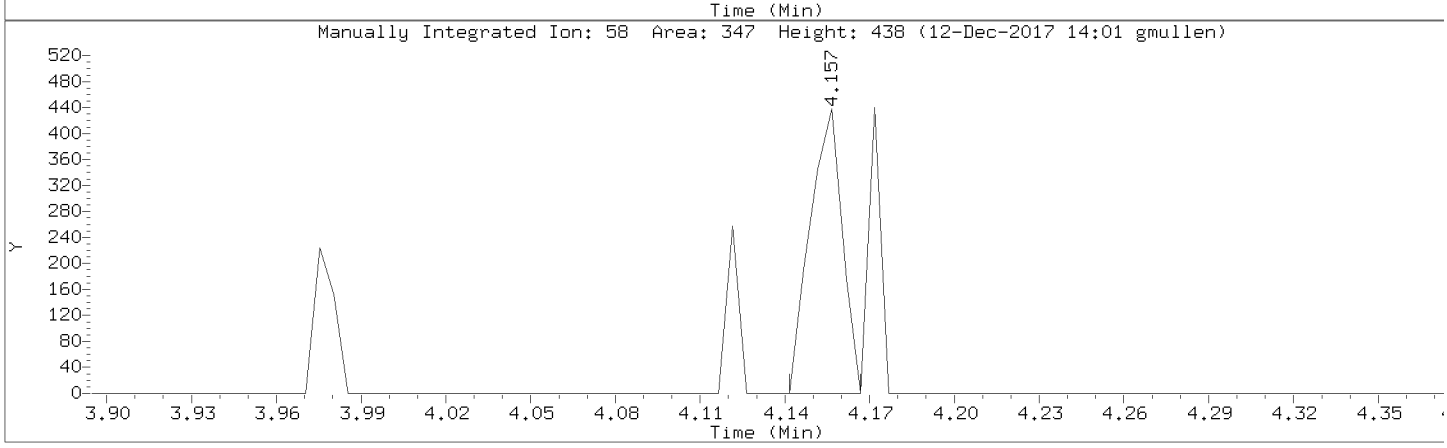
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d18.d
Injection Date: 12-DEC-2017 13:47
Instrument: 20msvd.i
Lab Sample ID: 2066645004

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d18.d

Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

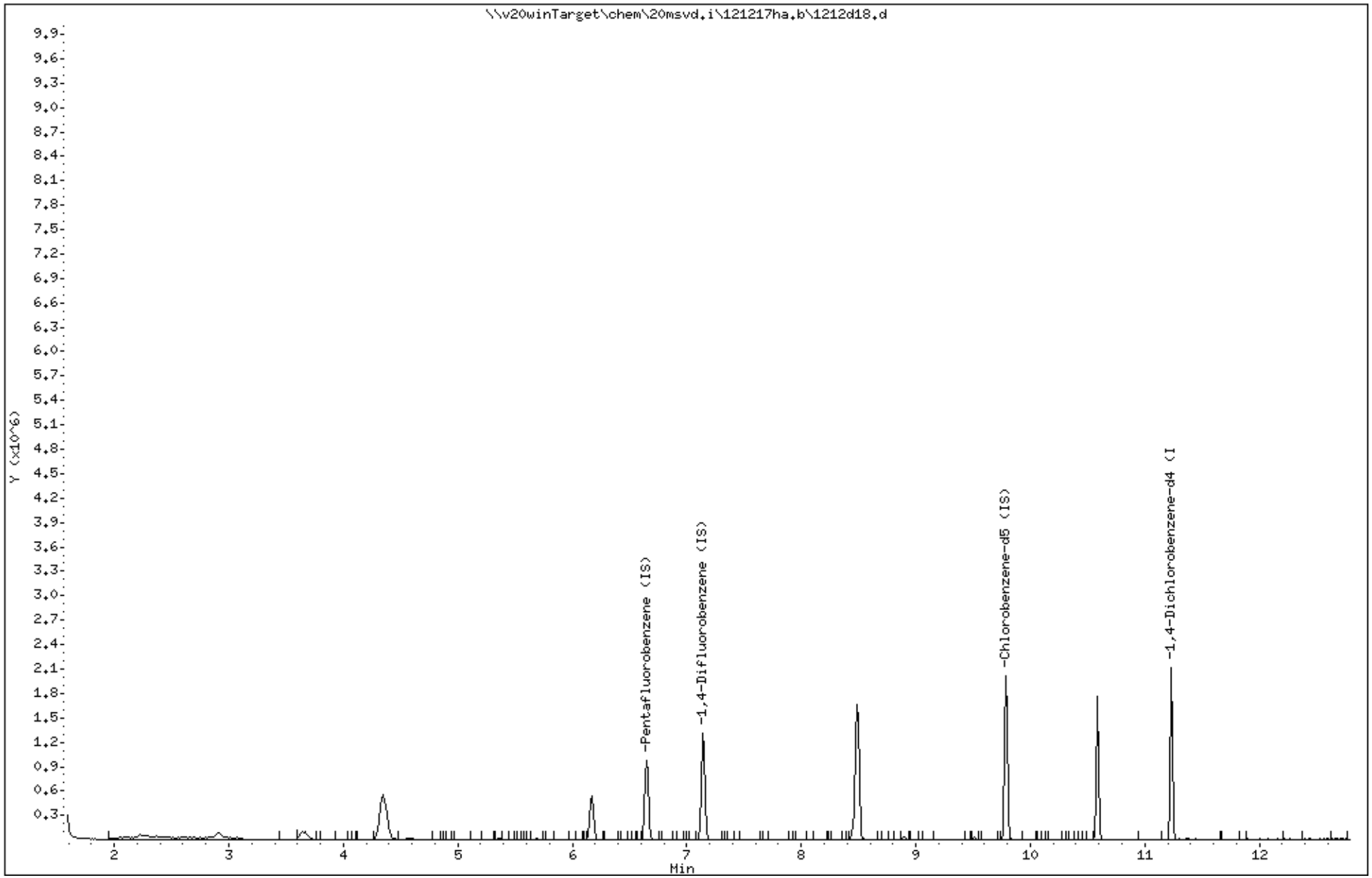
Sample Info: 2066645004

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



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Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

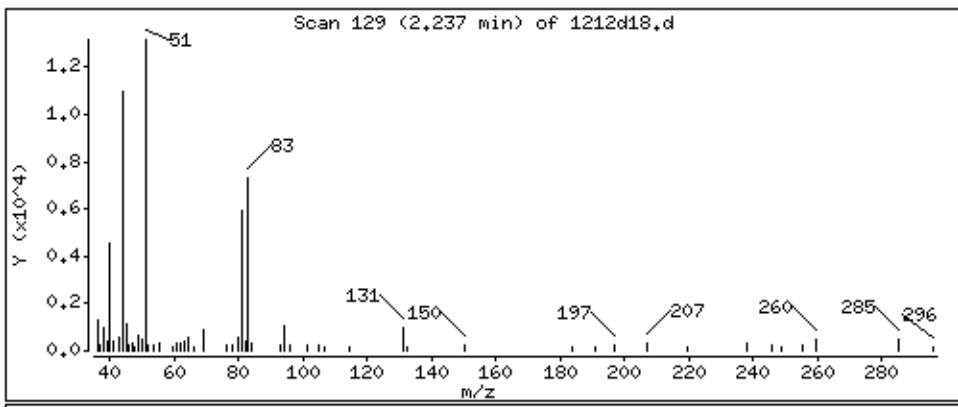
Operator: GEM

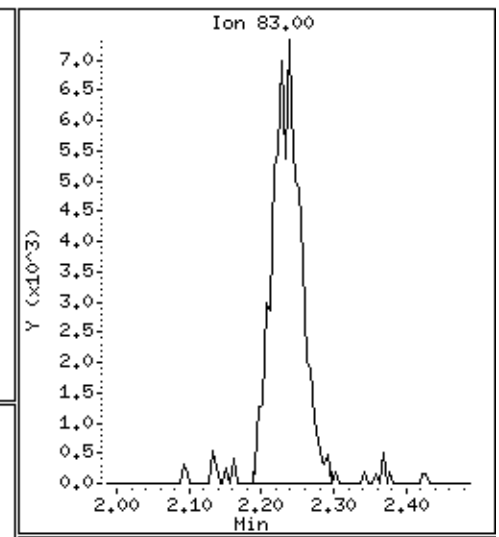
Column phase: DB-624

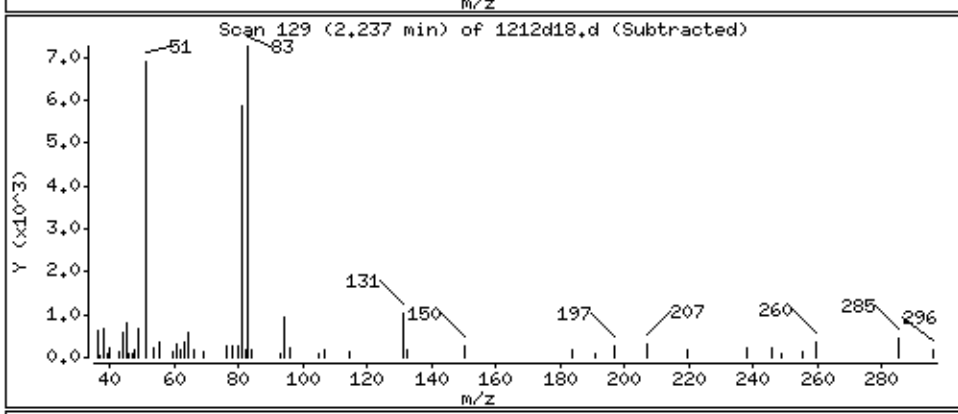
Column diameter: 0.18

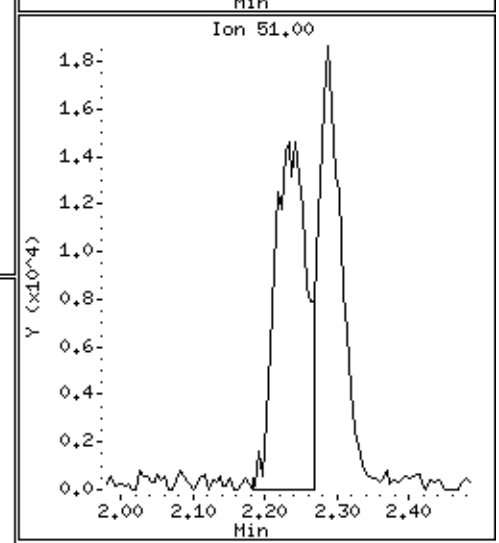
1 Haloether 229

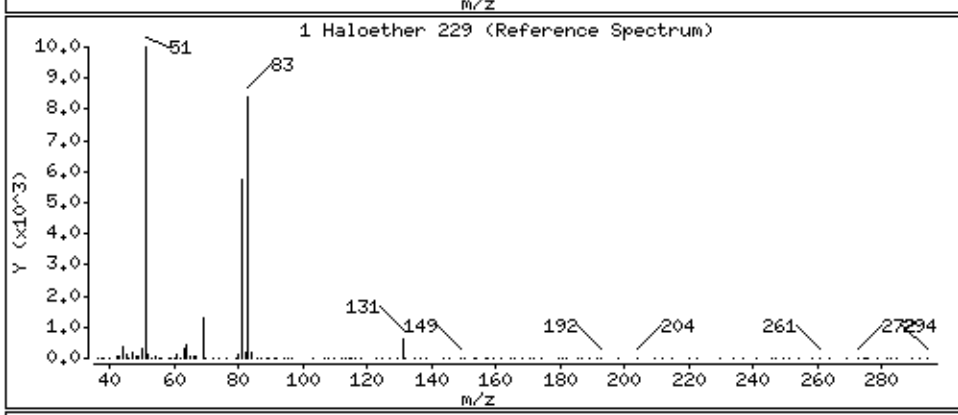
Concentration: 4.32 ug/L

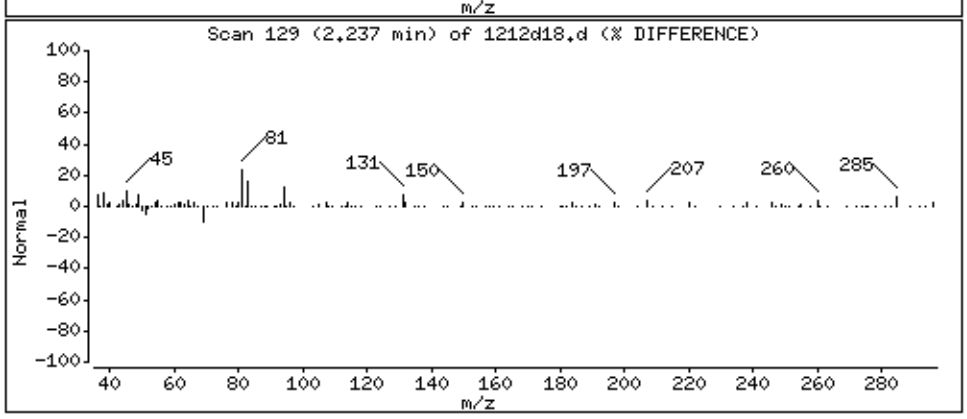












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d18.d

Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

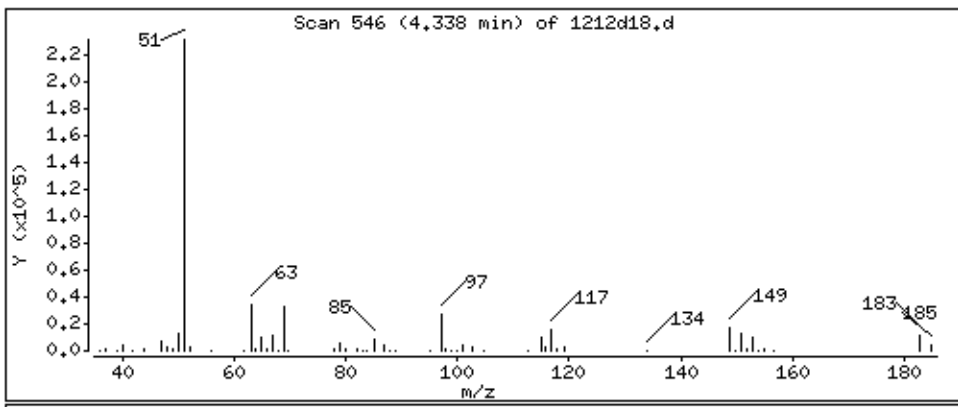
Operator: GEM

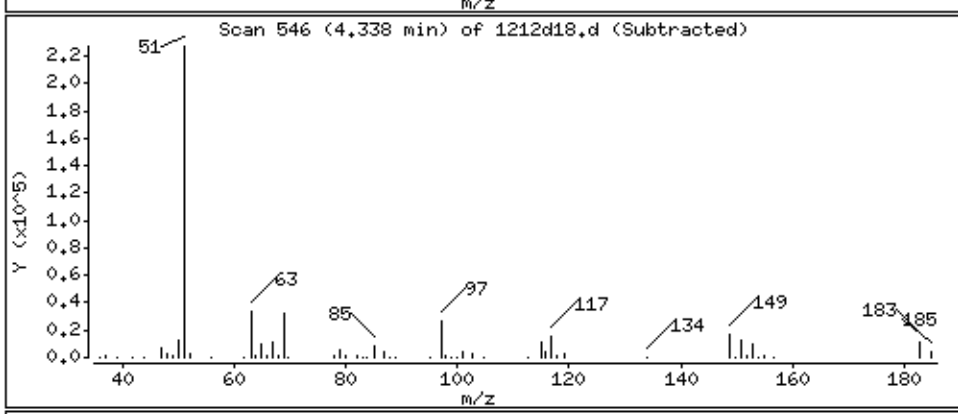
Column phase: DB-624

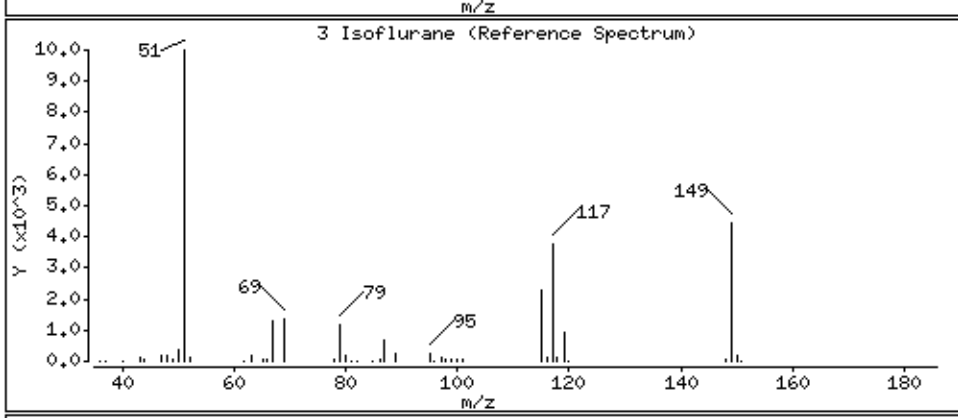
Column diameter: 0.18

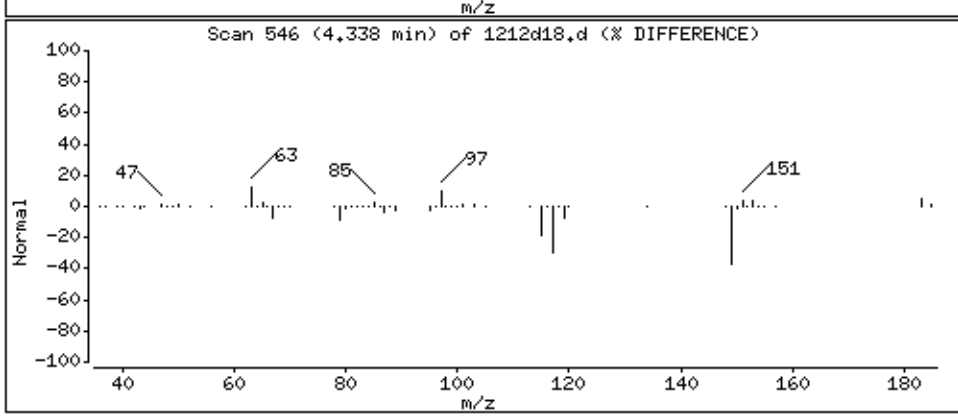
3 Isoflurane

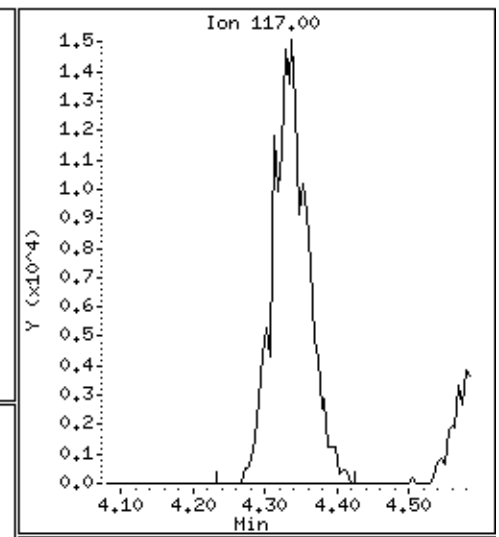
Concentration: 19.3 ug/L

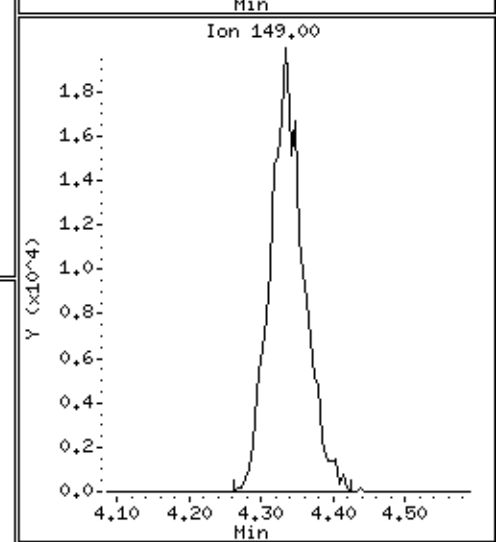


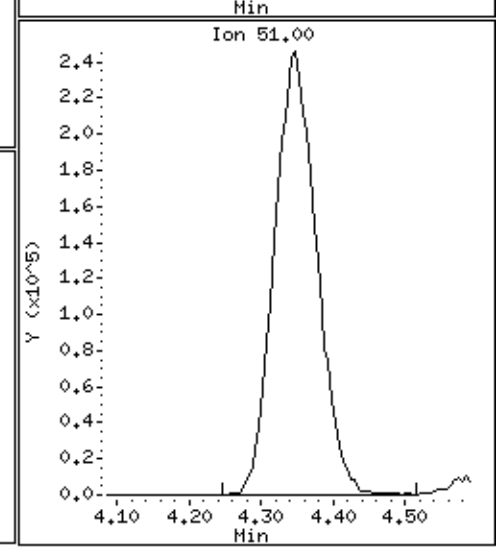












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d18.d

Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

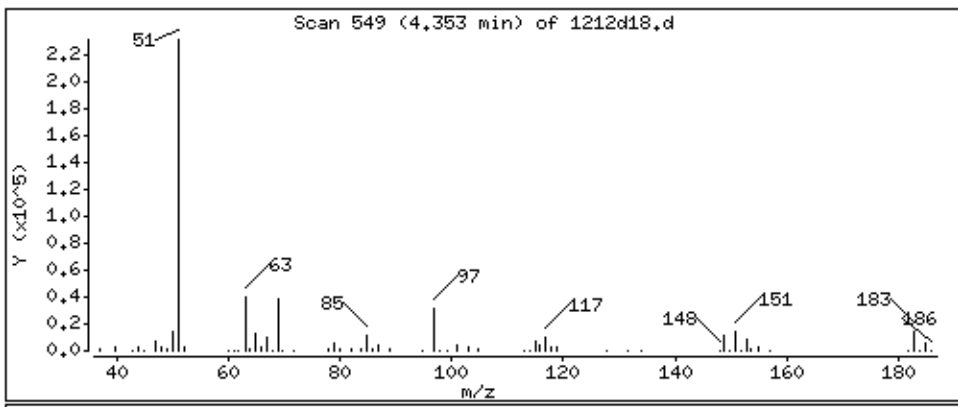
Operator: GEM

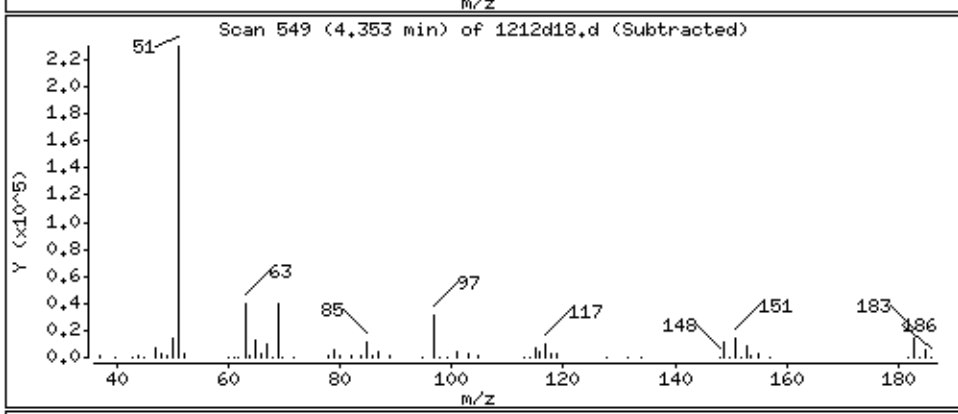
Column phase: DB-624

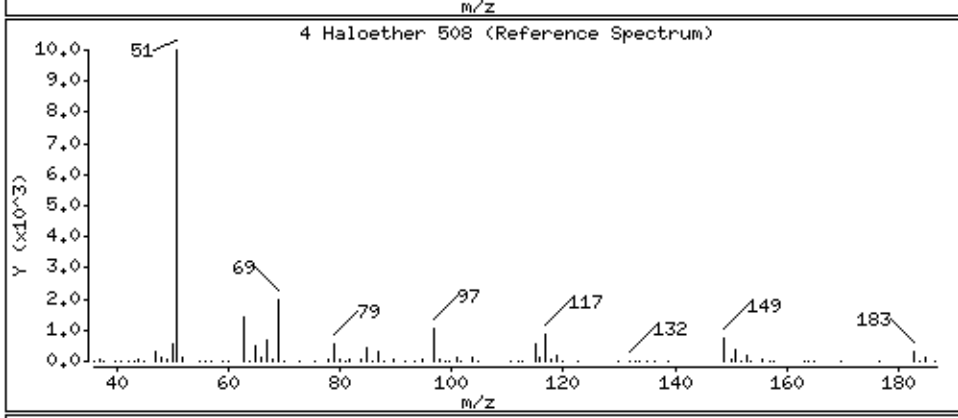
Column diameter: 0.18

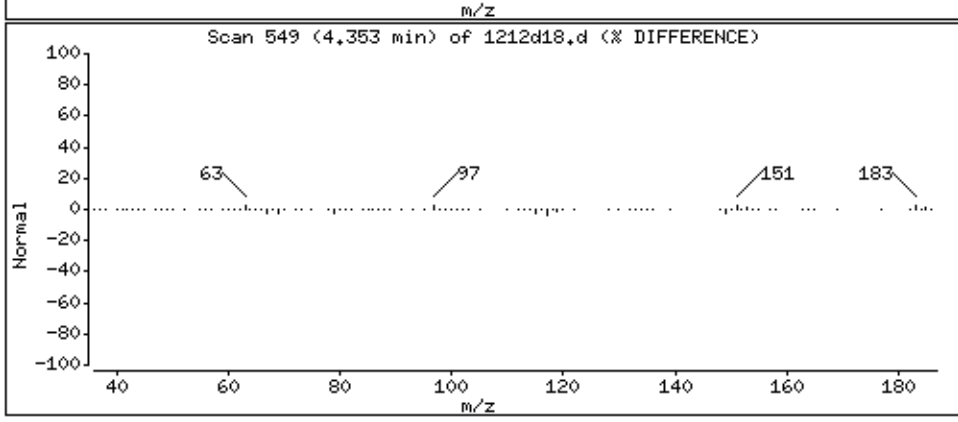
4 Haloether 508

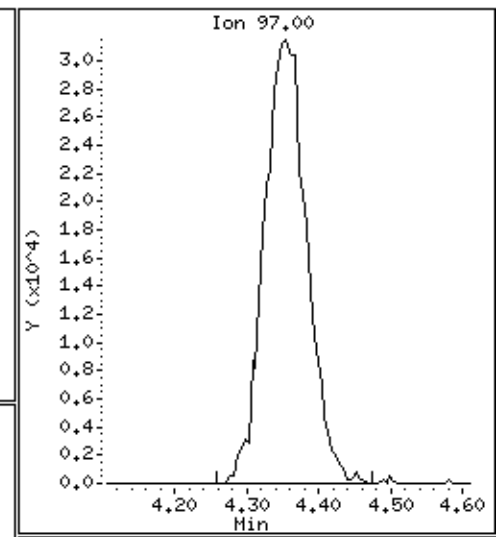
Concentration: 54.7 ug/L

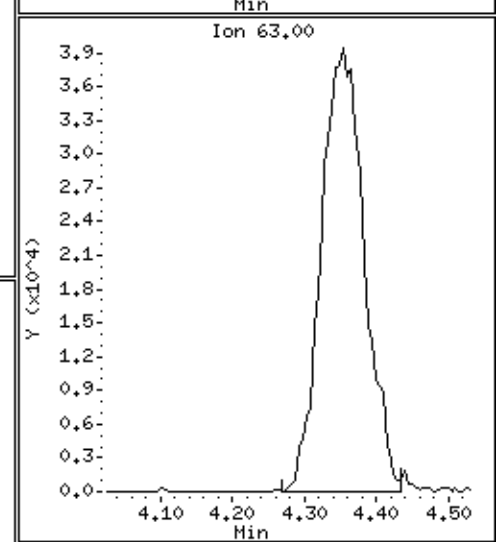


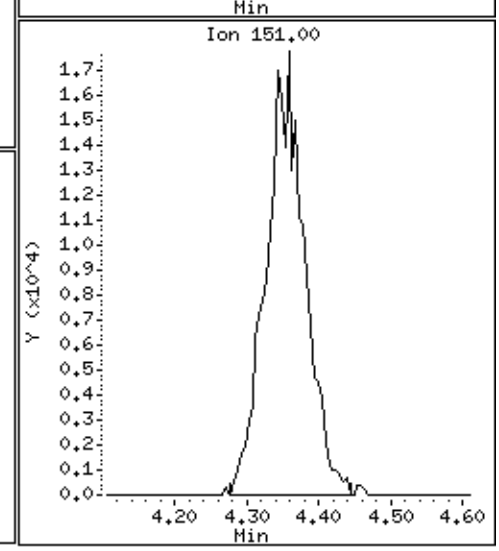












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d18.d

Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

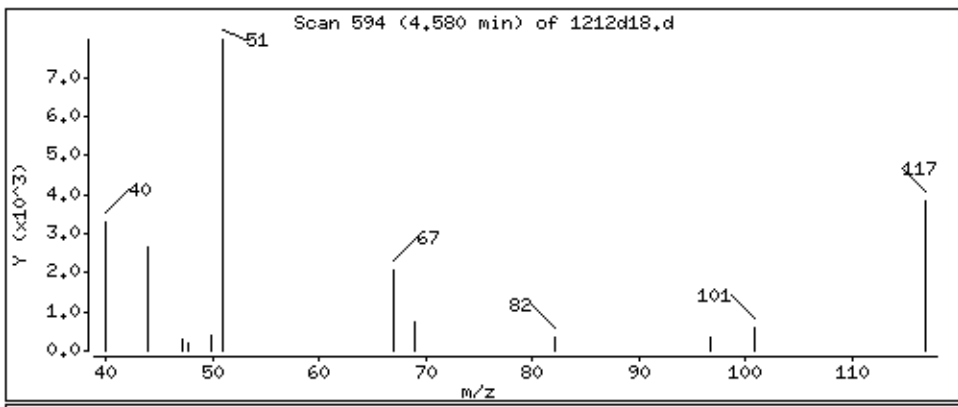
Operator: GEM

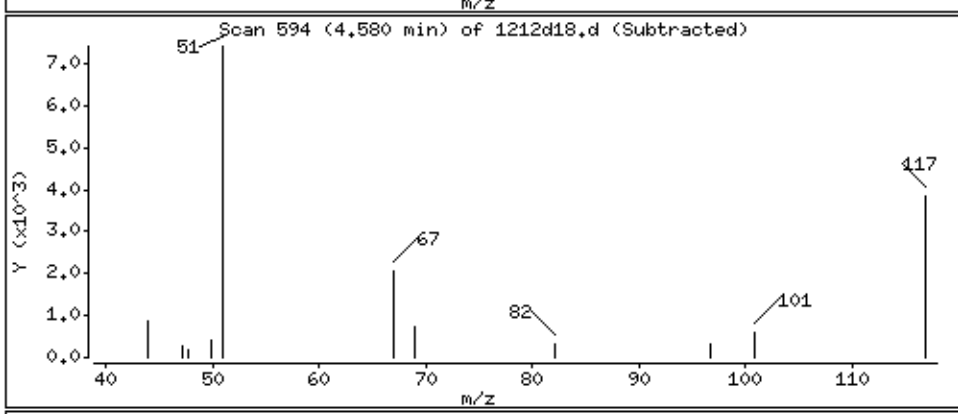
Column phase: DB-624

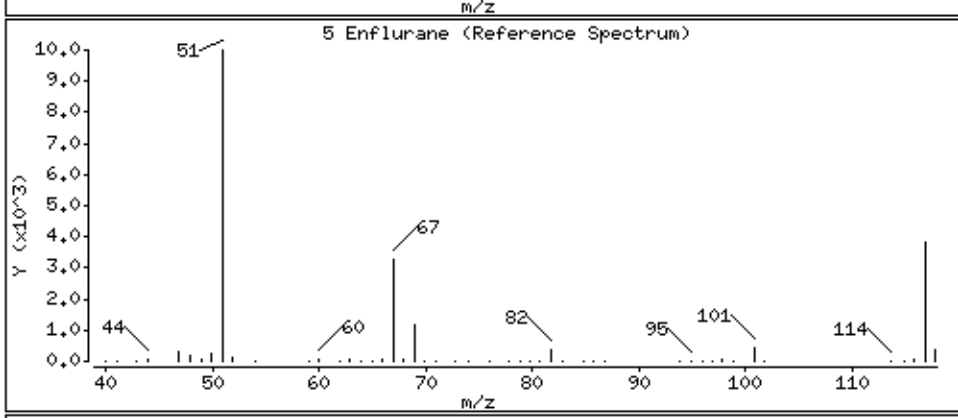
Column diameter: 0.18

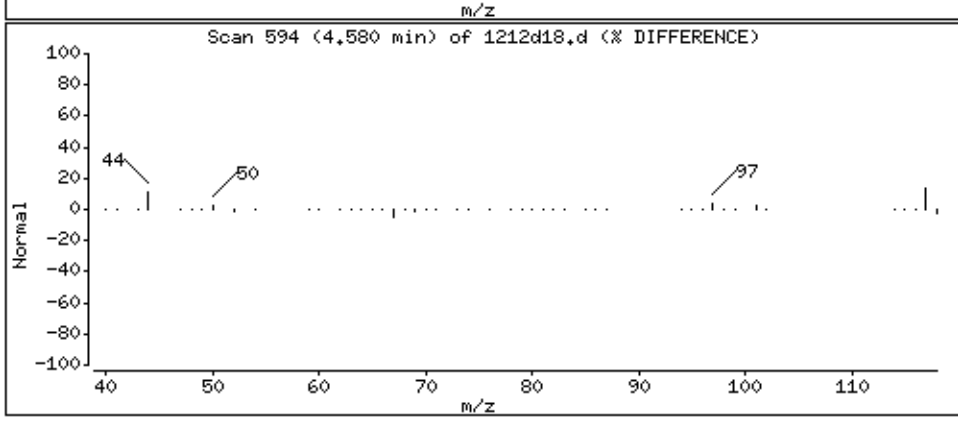
5 Enflurane

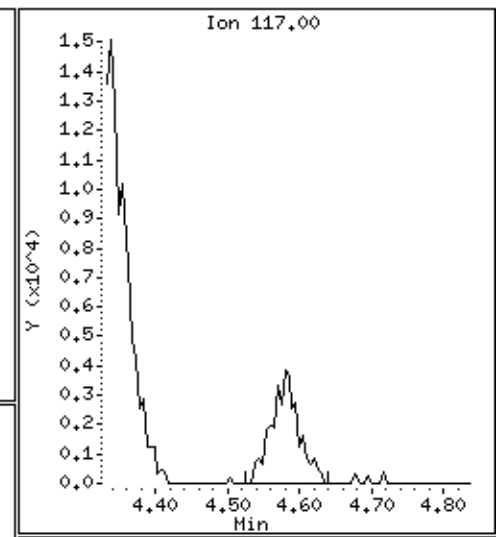
Concentration: 1.87 ug/L

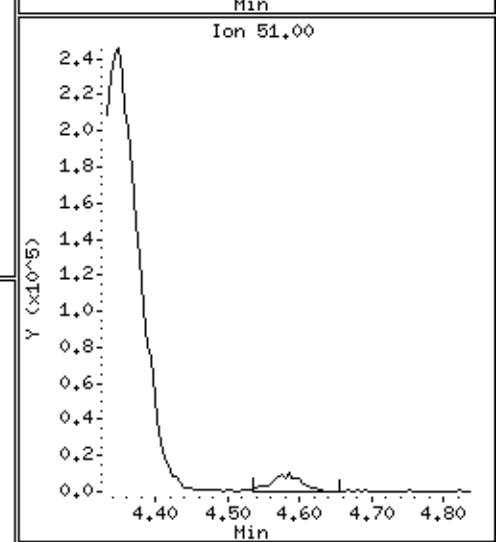


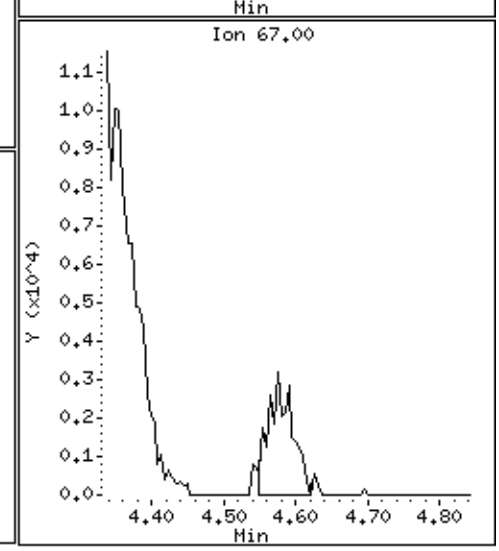












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d18.d

Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

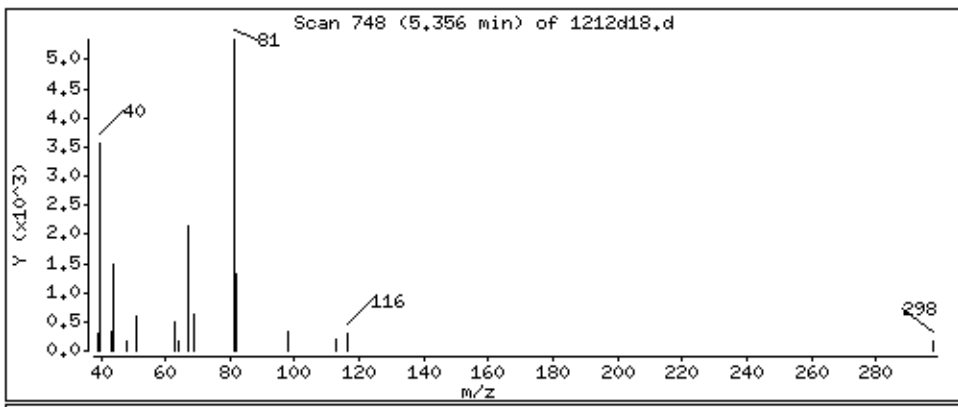
Operator: GEM

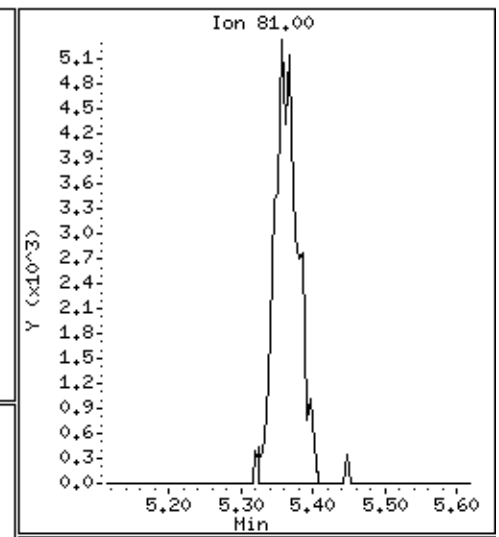
Column phase: DB-624

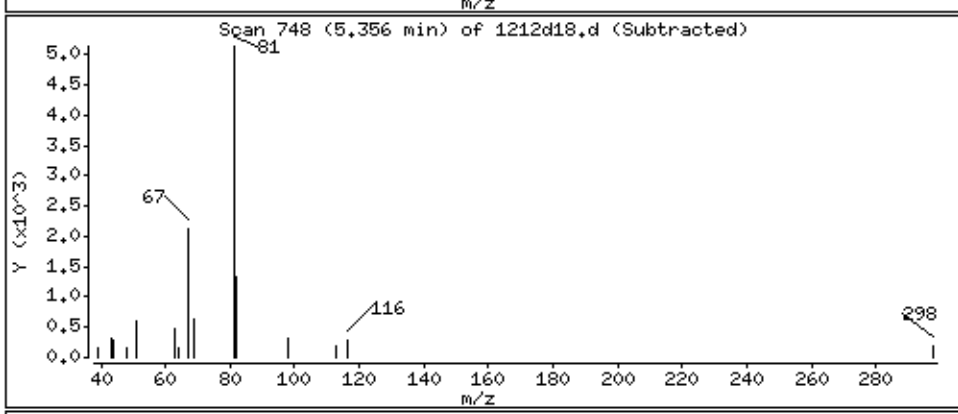
Column diameter: 0.18

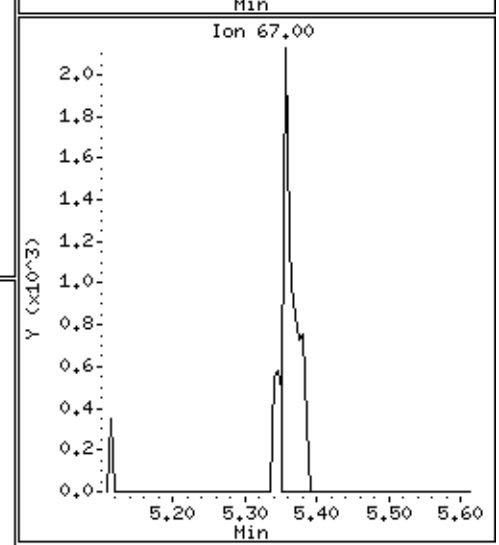
6 Halomar

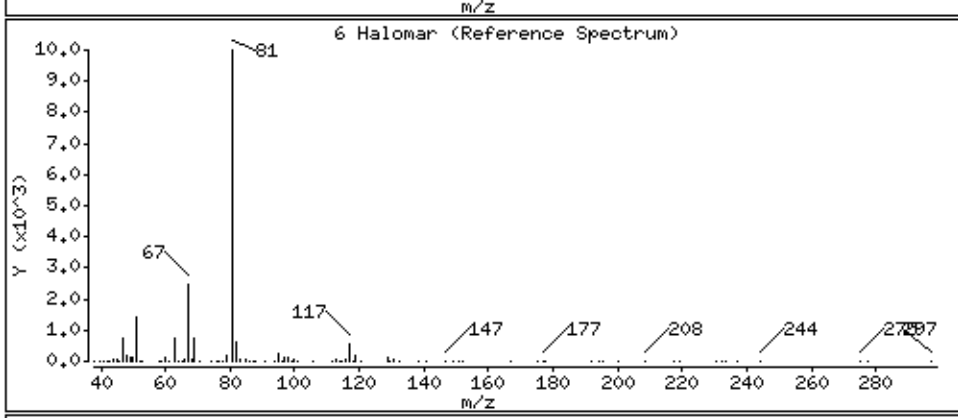
Concentration: 1.04 ug/L

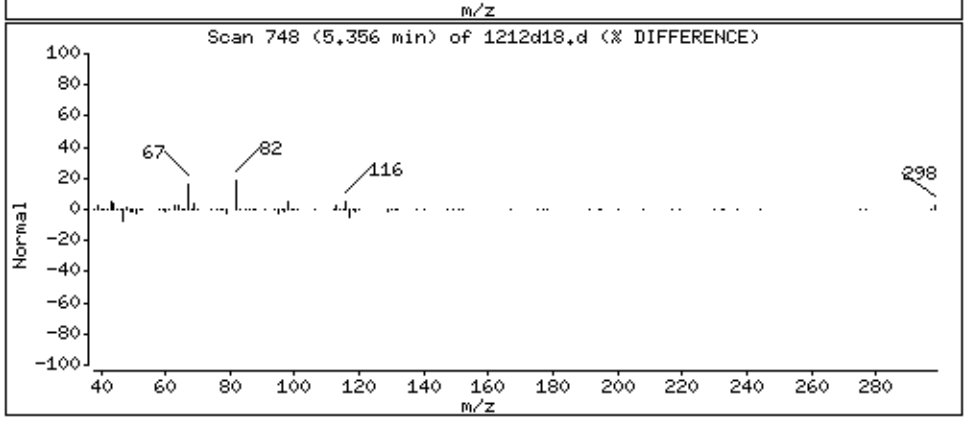












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d18.d

Date : 12-DEC-2017 13:47

Client ID: MW-1A-3-BP

Instrument: 20msvd.i

Sample Info: 2066645004

Purge Volume: 5.0

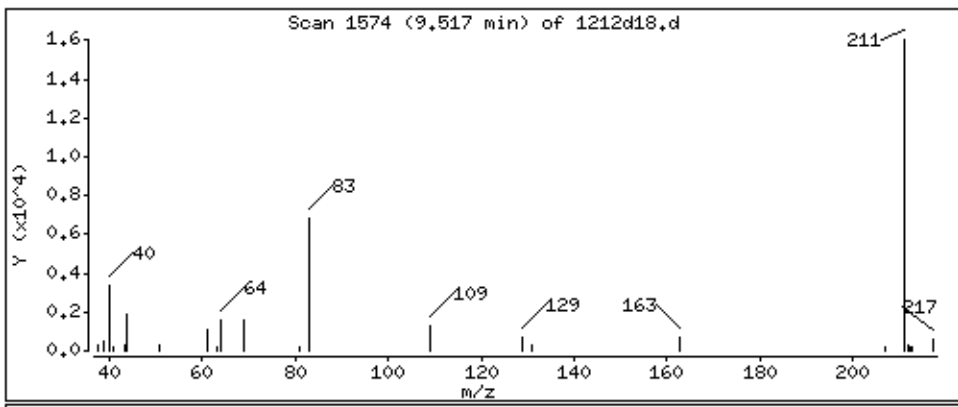
Operator: GEM

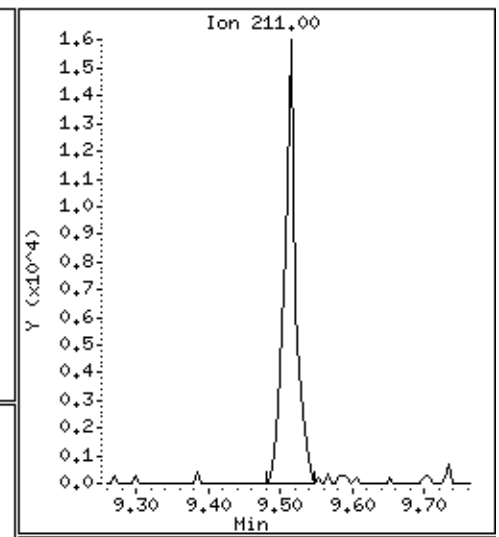
Column phase: DB-624

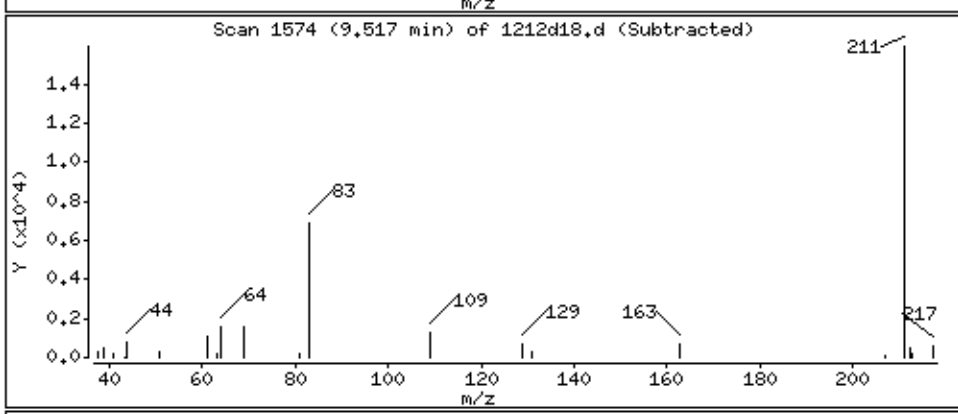
Column diameter: 0.18

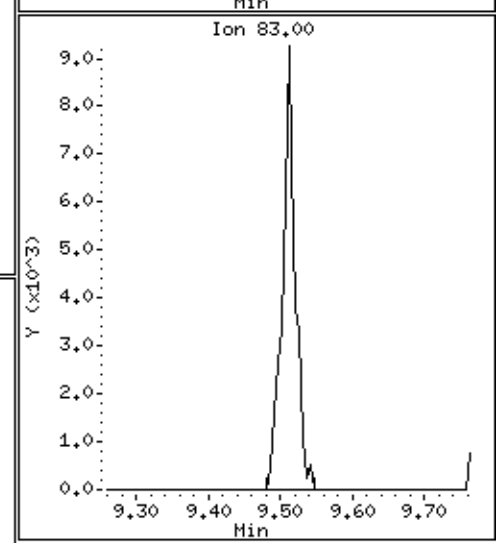
13 Haloether 528

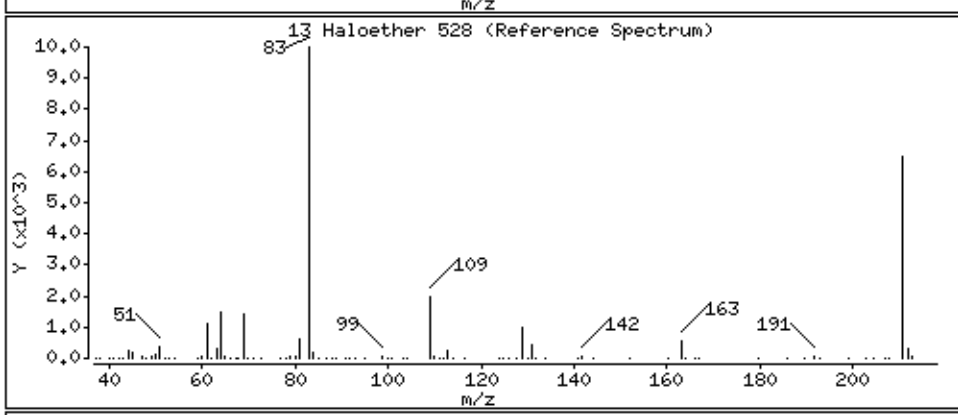
Concentration: 1.34 ug/L

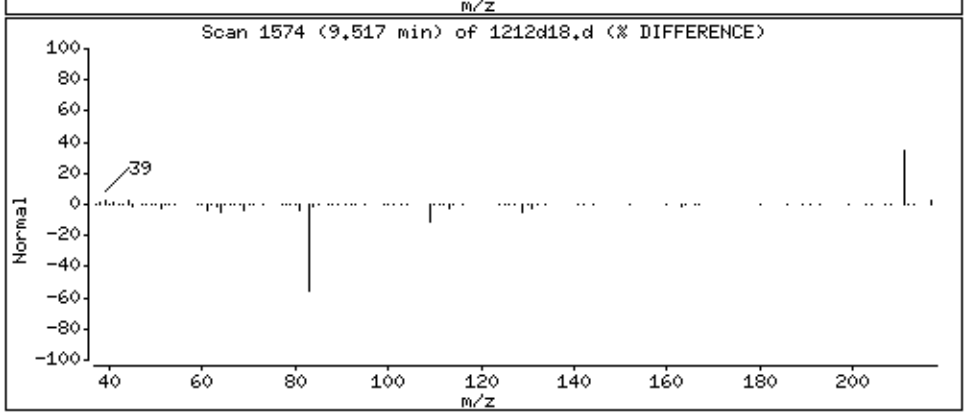












Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d18.d
Injection Date: 12-DEC-2017 13:47
Instrument: 20msvd.i
Lab Sample ID: 2066645004

Compound: Haloether 508 Review Code: LT
CAS Number:

SAMPLE NO.

MW-1D-3-BP

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:05
Lab Sample ID: 2066645005
Date Analyzed: 12/12/2017 14:05
Lab File ID: 121217.B\1212D19.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	4.5	
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-1D-3-BP

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:05
Lab Sample ID: 2066645005
Date Analyzed: 12/12/2017 14:05
Lab File ID: 121217.B\1212D19.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MW-1D-3-BP

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:05
Lab Sample ID: 2066645005
Date Analyzed: 12/12/2017 14:05
Lab File ID: 121217HA.B\1212D19.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	127	
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	7.2	
76-38-0	Methoxyflurane	ND	U
	Total Haloether	134	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d19.d
Lab Smp Id: 2066645005 Client Smp ID: MW-1D-3-BP
Inj Date : 12-DEC-2017 14:05
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645005
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Haloether 229	83	2.227	2.237	(0.335)	2984	0.67586	0.676(M)	
2 Haloether 406	85	3.889	3.884	(0.585)	3204	0.42441	0.424(M)	
3 Isoflurane	117	4.338	4.333	(0.652)	17845	7.16167	7.16(M)	
4 Haloether 508	97	4.358	4.358	(0.655)	291763	126.956	127	
5 Enflurane	117	Compound Not Detected.						(D)
6 Halomar	81	Compound Not Detected.						
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	278322	50.0000		
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	916292	50.0000		
7 Haloether 421	67	Compound Not Detected.						
8 Haloether 427	151	Compound Not Detected.						
11 Haloether 428	117	Compound Not Detected.						
12 Methoxyflurane	81	Compound Not Detected.						
13 Haloether 528	211	9.516	9.511	(1.332)	10462	0.75216	0.752	
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	392614	50.0000		
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	374369	50.0000		

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d19.d
Lab Smp Id: 2066645005 Client Smp ID: MW-1D-3-BP
Inj Date : 12-DEC-2017 14:05
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645005
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.151	4.146	(0.624)	3355	2.34144	2.34	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	5.688	5.693	(0.855)	2436	0.40676	0.407	
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	306946	50.0948	50.1	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	278322	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						(D
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						(D
	42 Trichloroethene	130	7.103	7.108	(0.994)	2737	0.43451	0.434	
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	915296	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1018562	49.7358	49.7	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	8.907	8.897	(0.910)	23532	4.51939	4.52	
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	392614	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.943)	385451	52.0651	52.1	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D
	76 2-Chlorotoluene	91	Compound Not Detected.						

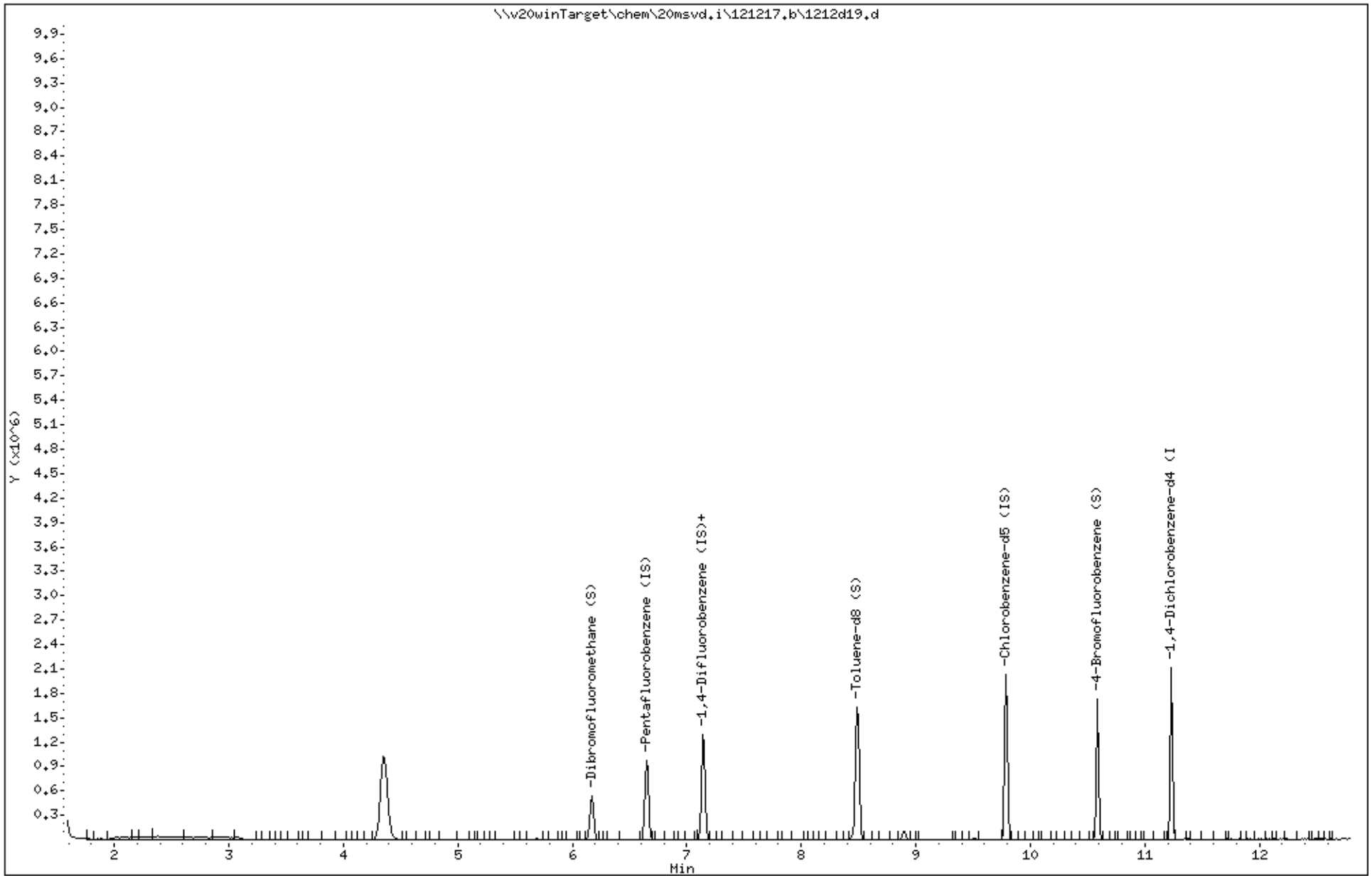
Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	374369	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d19.d
Date : 12-DEC-2017 14:05
Client ID: MW-1D-3-BP
Sample Info: 2066645005
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d19.d

Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

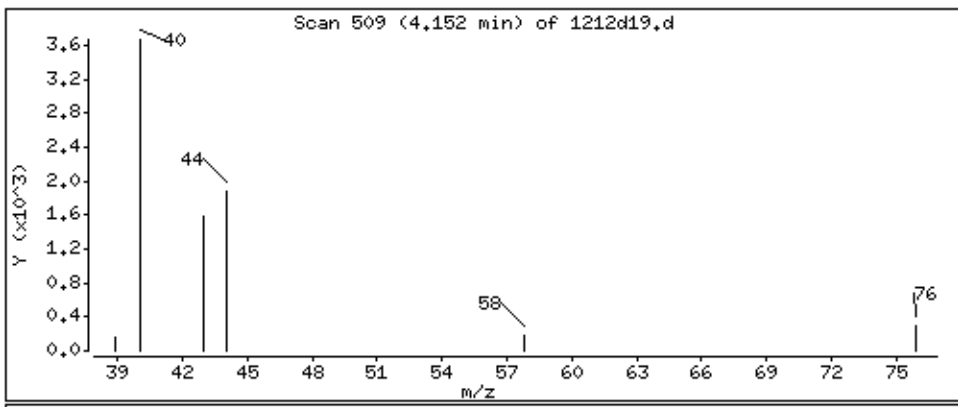
Operator: GEM

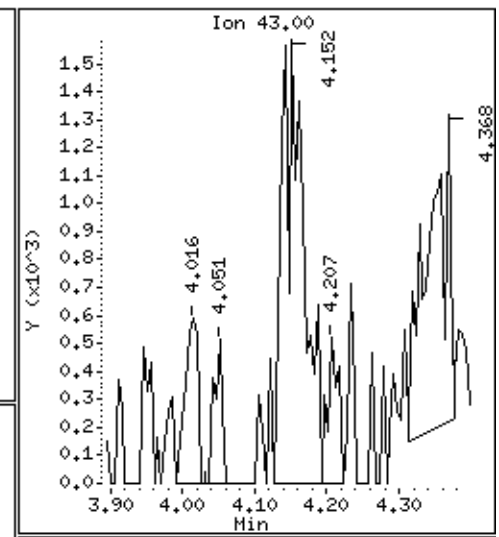
Column phase: RTX VMS 30m

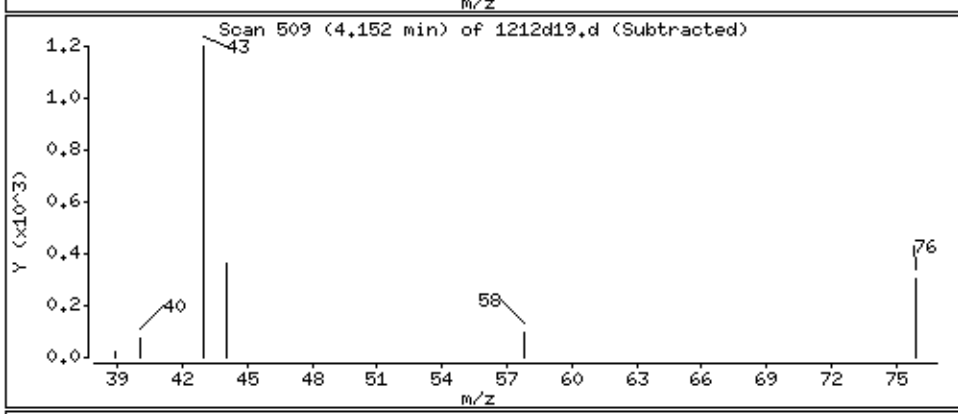
Column diameter: 0.25

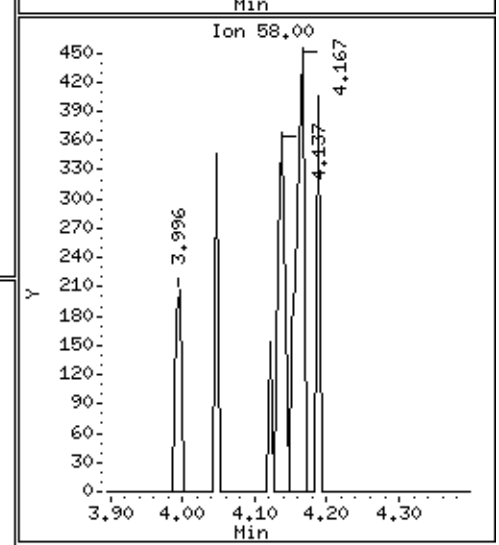
14 Acetone

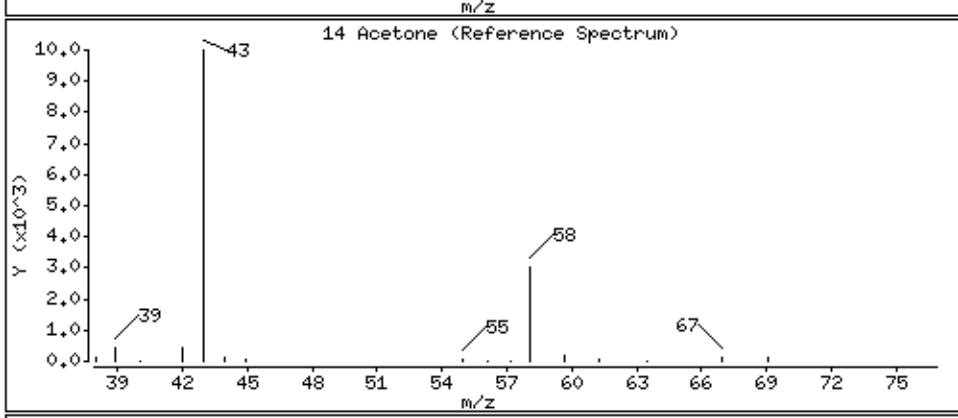
Concentration: 2.34 ug/L

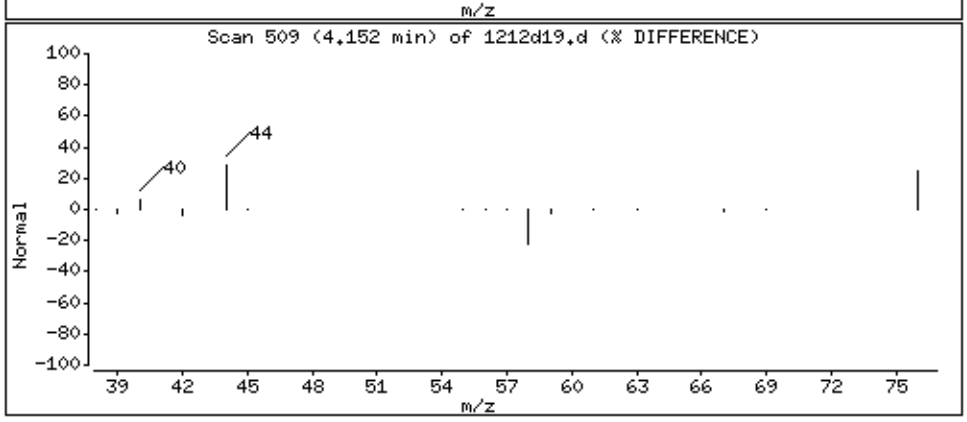












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d19.d

Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

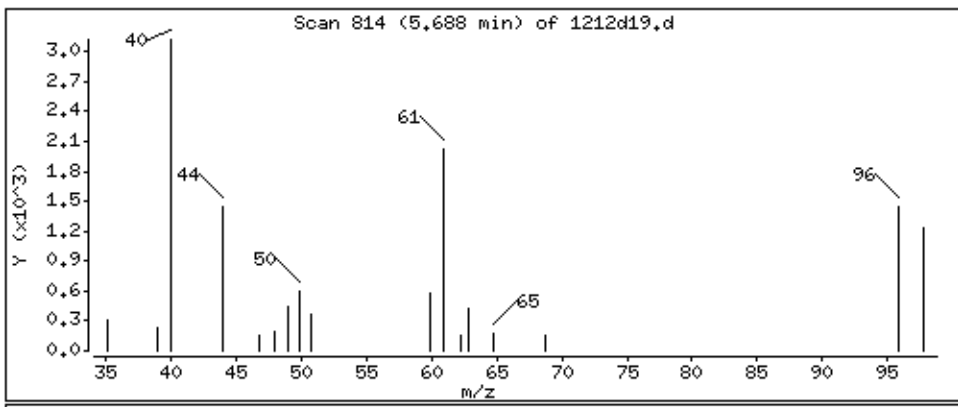
Operator: GEM

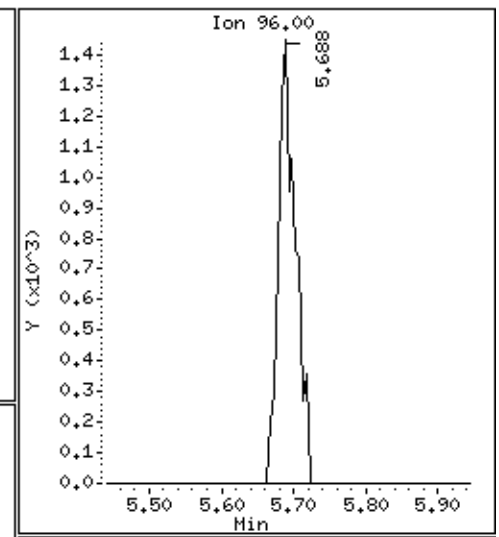
Column phase: RTX VMS 30m

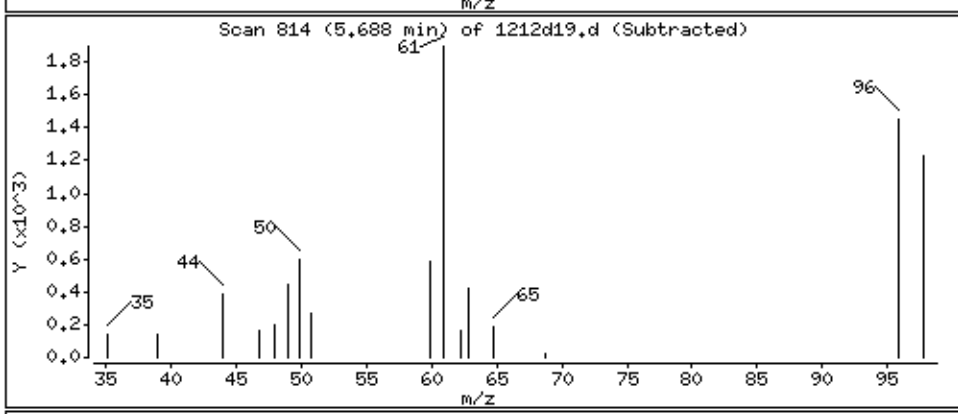
Column diameter: 0.25

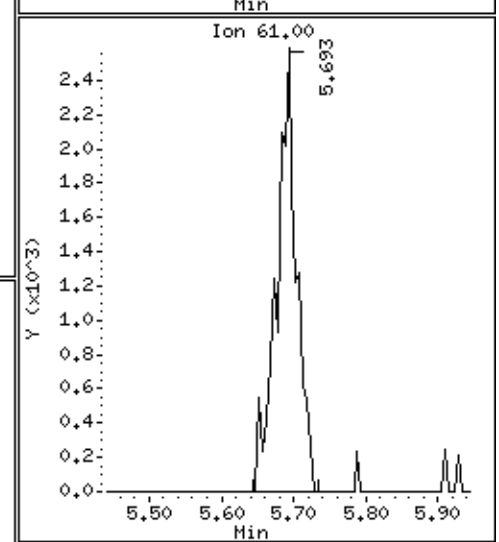
24 cis-1,2-Dichloroethene

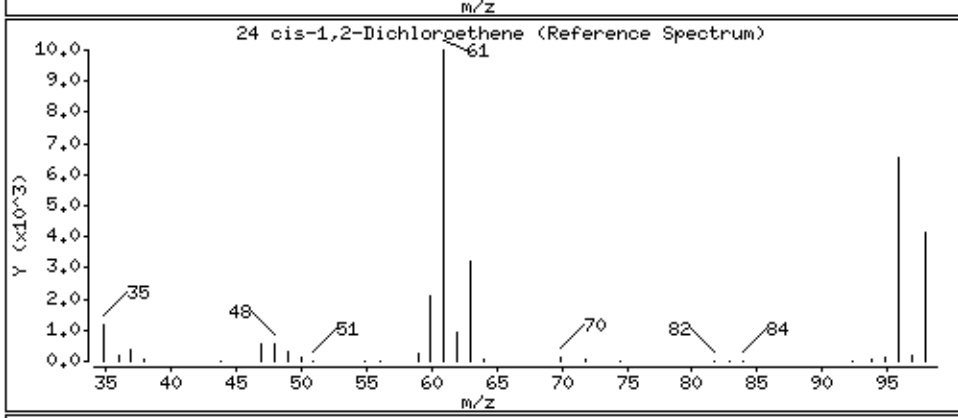
Concentration: 0.407 ug/L

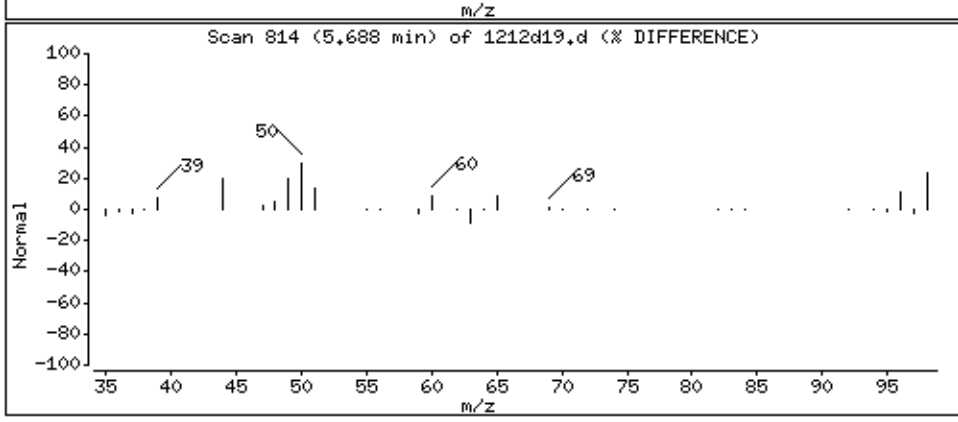


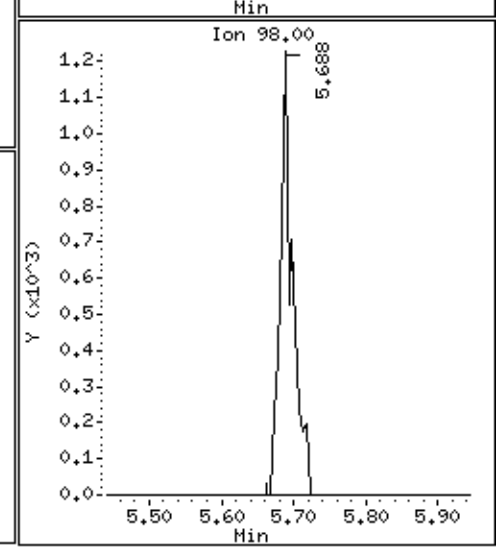












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d19.d

Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

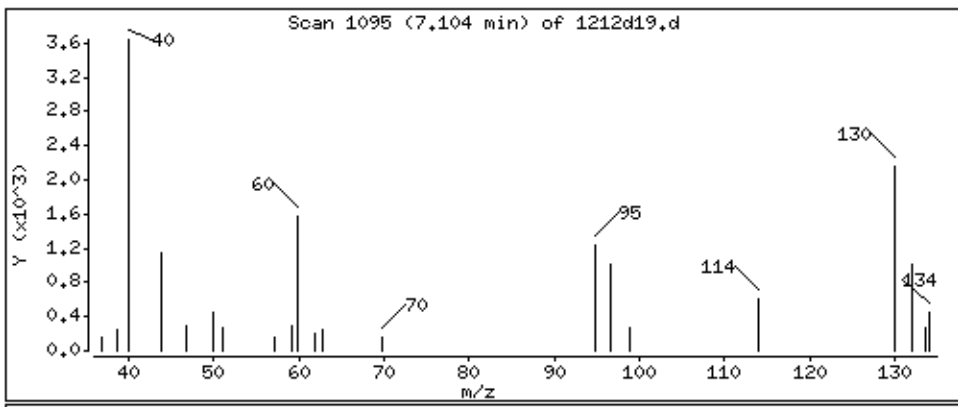
Operator: GEM

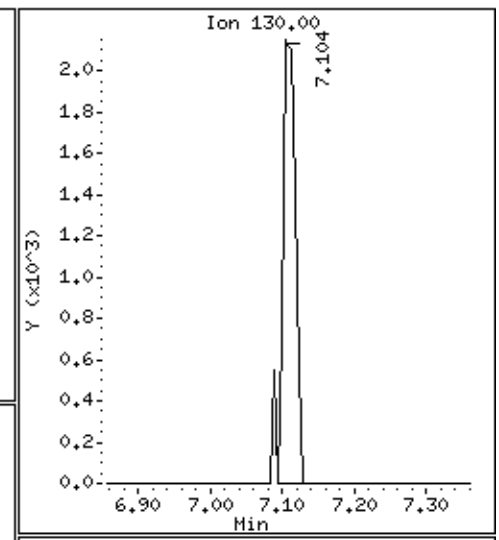
Column phase: RTX VMS 30m

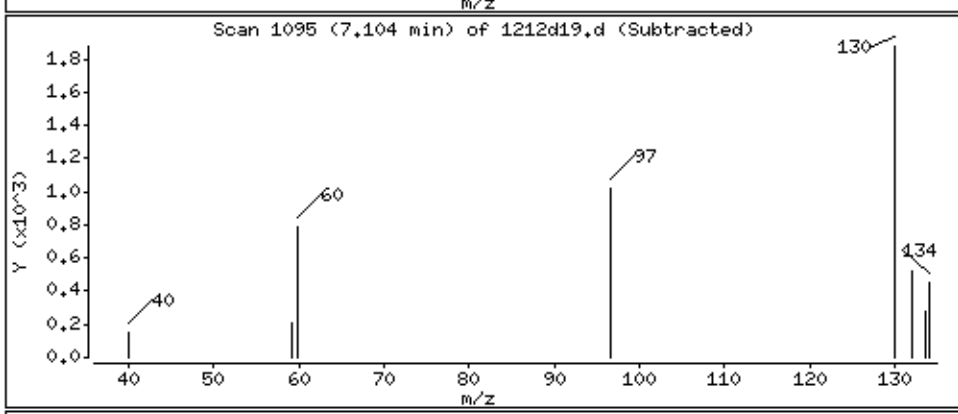
Column diameter: 0.25

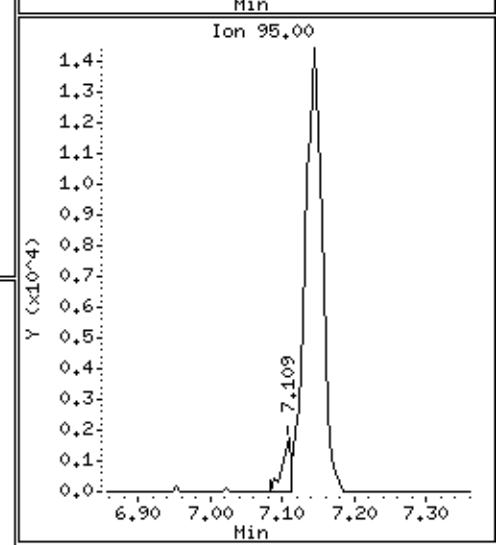
42 Trichloroethene

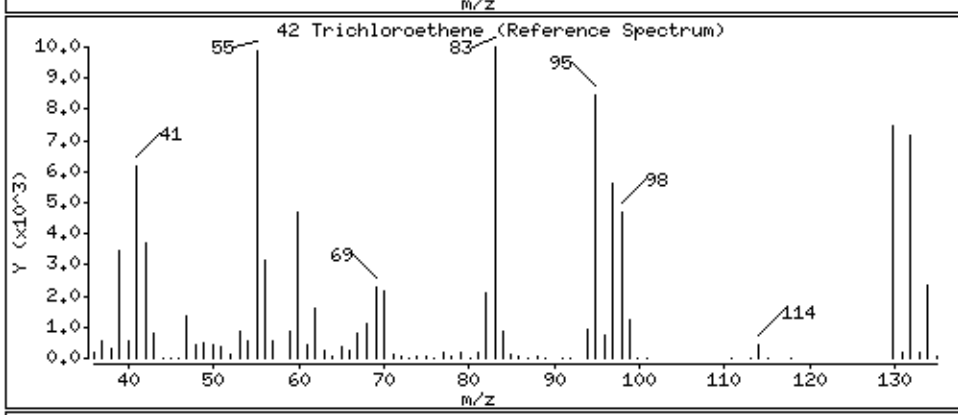
Concentration: 0.434 ug/L

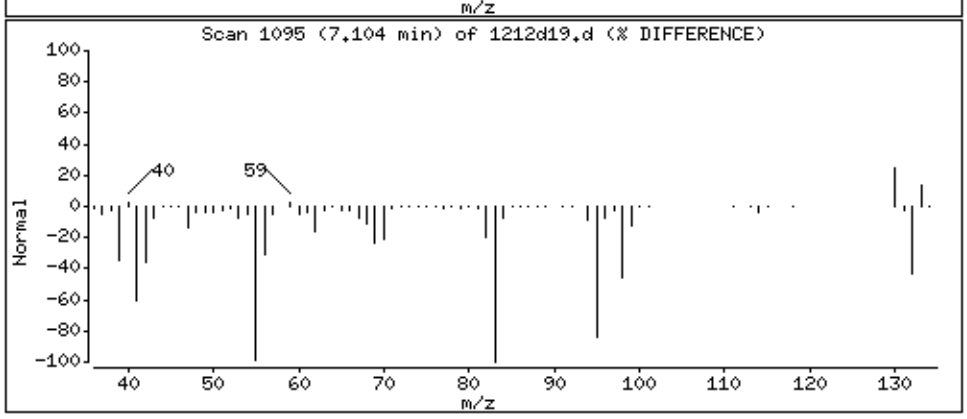












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d19.d

Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

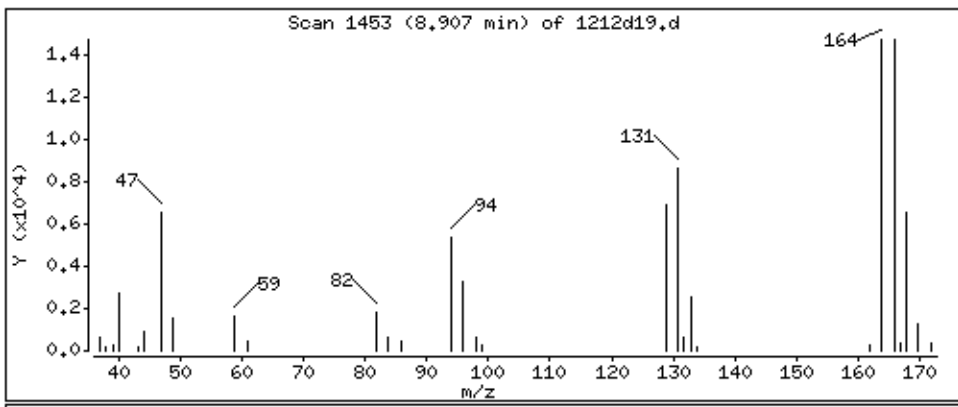
Operator: GEM

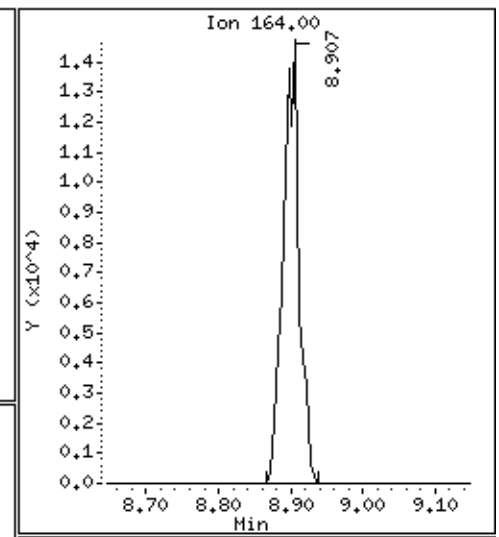
Column phase: RTX VMS 30m

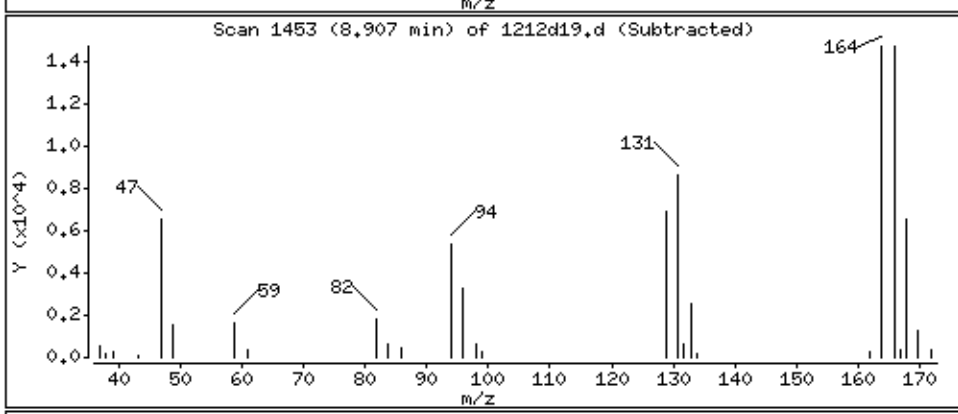
Column diameter: 0.25

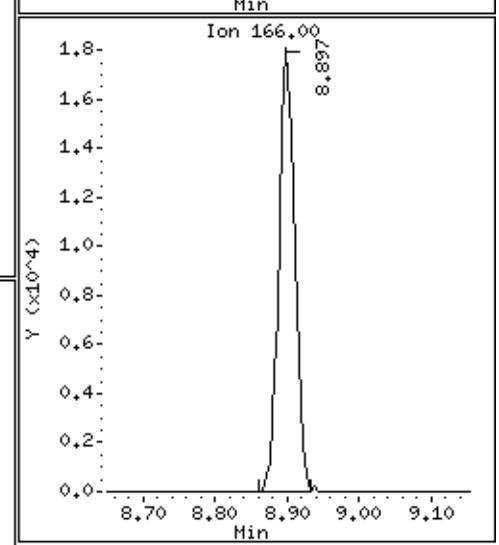
53 Tetrachloroethene

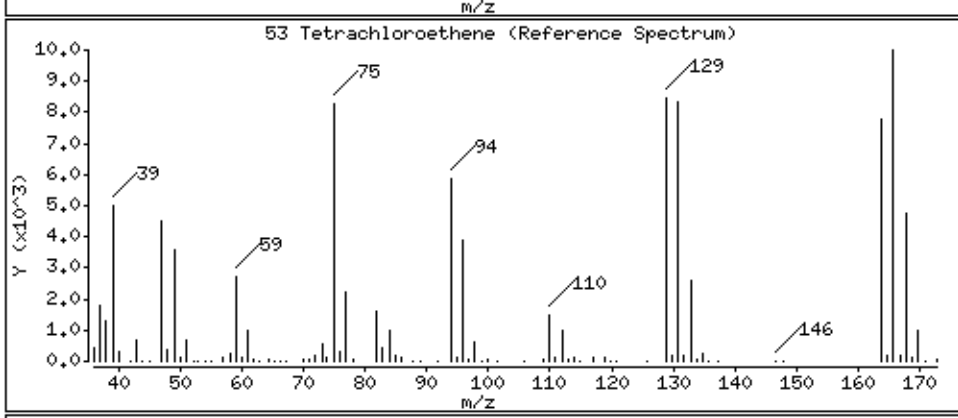
Concentration: 4.52 ug/L

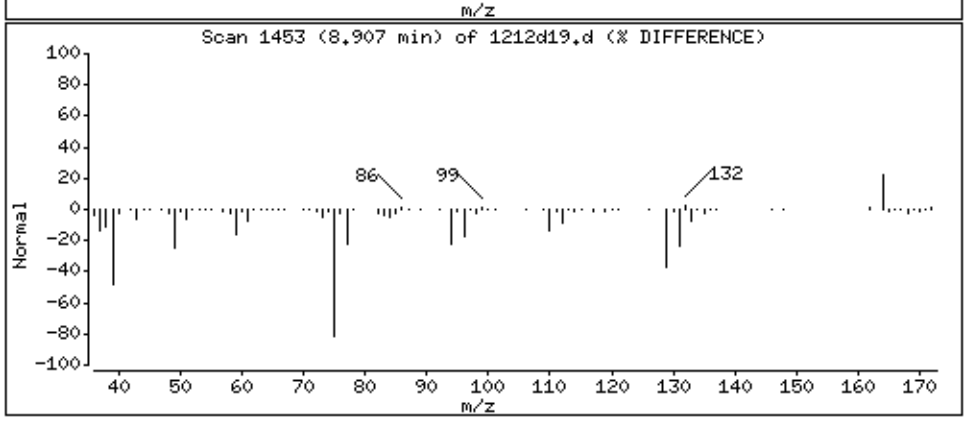








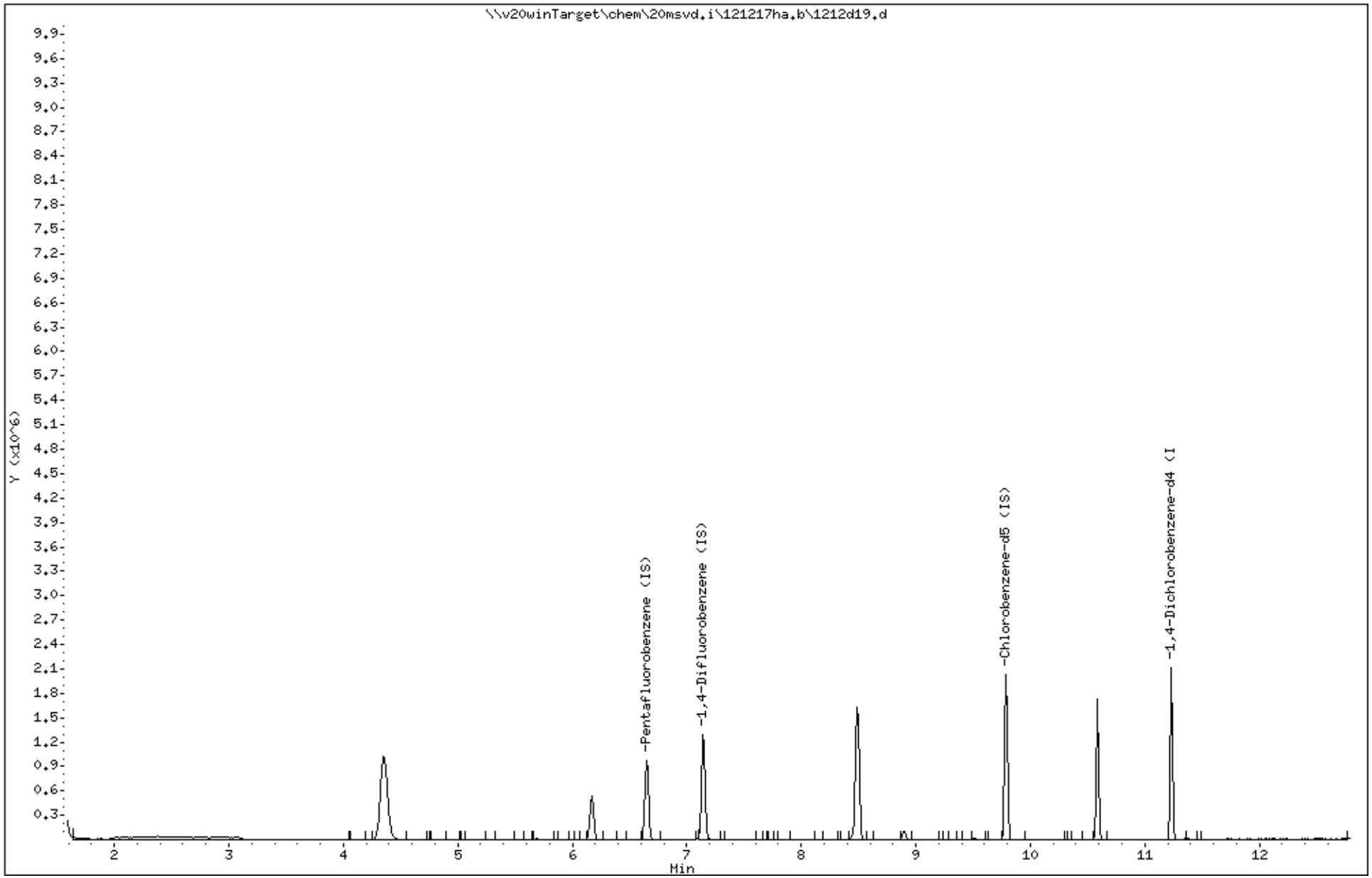




Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d19.d
Injection Date: 12-DEC-2017 14:05
Instrument: 20msvd.i
Lab Sample ID: 2066645005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d19.d
Date : 12-DEC-2017 14:05
Client ID: MW-1D-3-BP
Sample Info: 2066645005
Purge Volume: 5.0
Column phase: DB-624

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.18



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Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

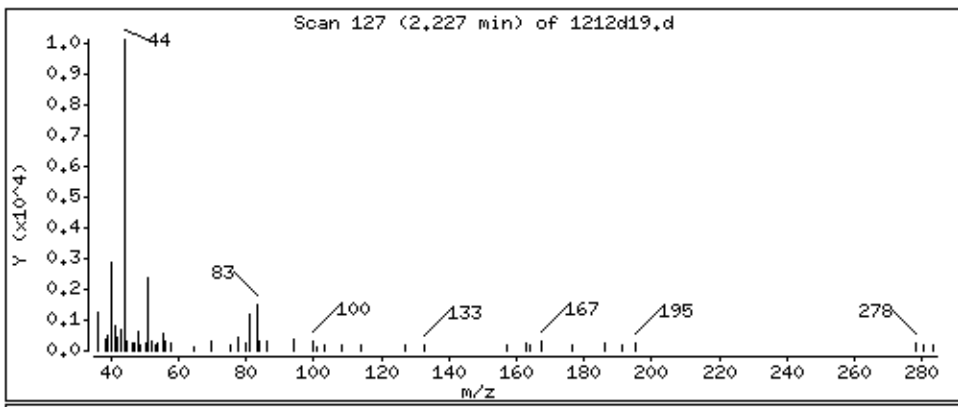
Operator: GEM

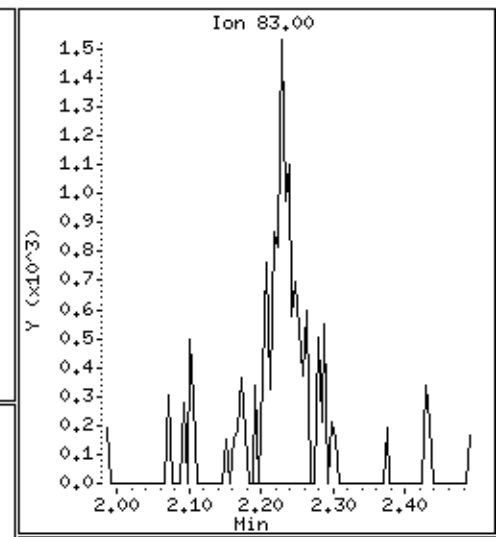
Column phase: DB-624

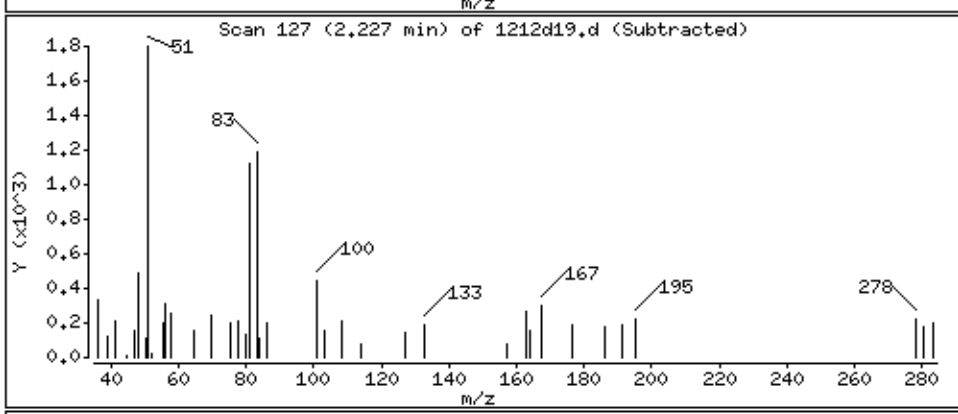
Column diameter: 0.18

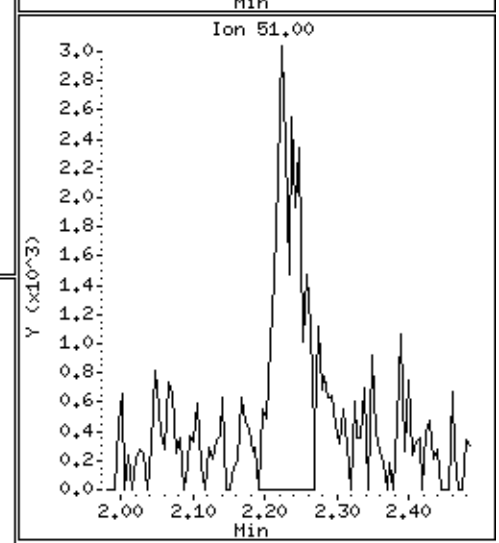
1 Haloether 229

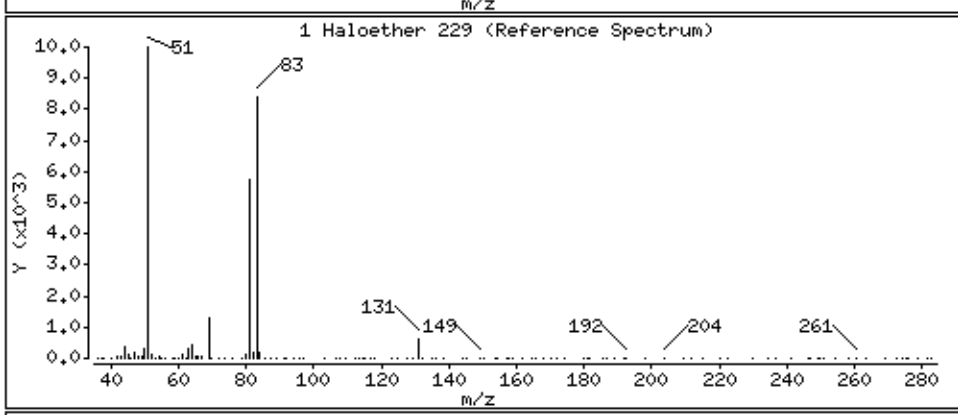
Concentration: 0.676 ug/L

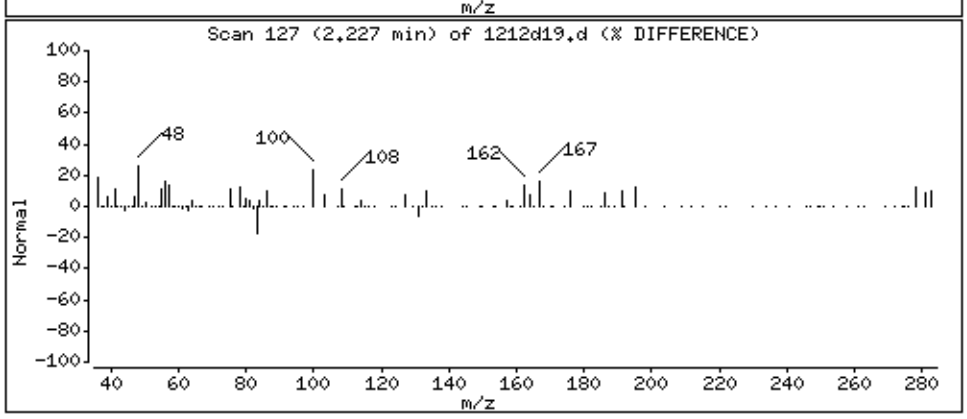












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d19.d

Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

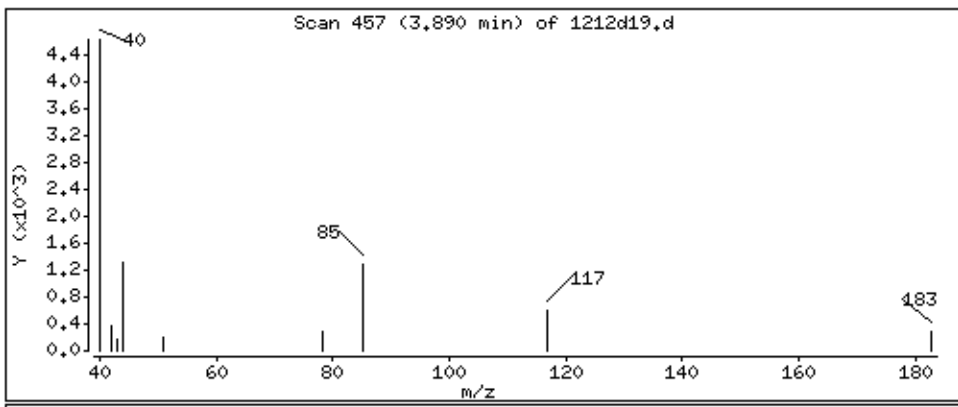
Operator: GEM

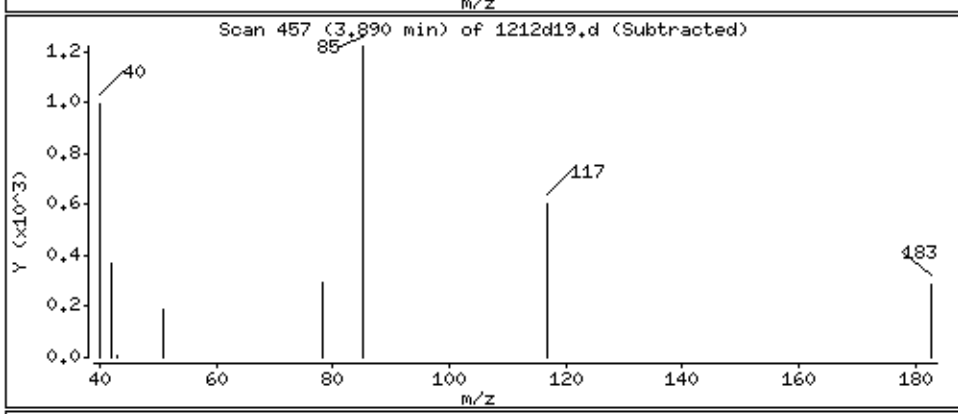
Column phase: DB-624

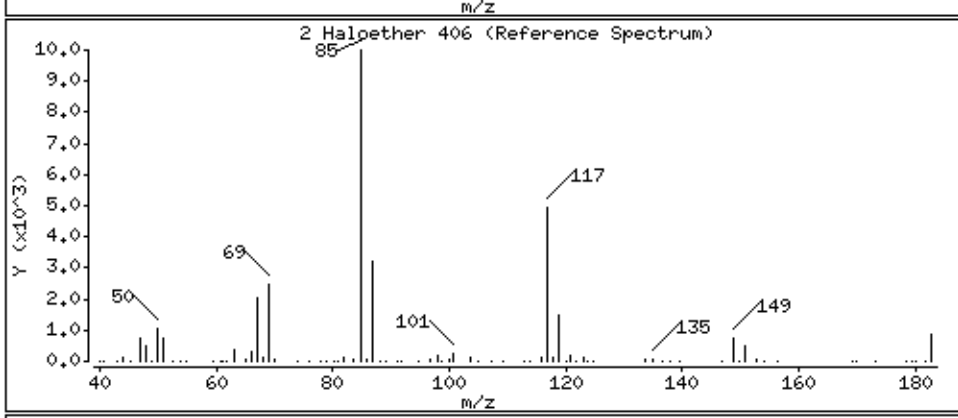
Column diameter: 0.18

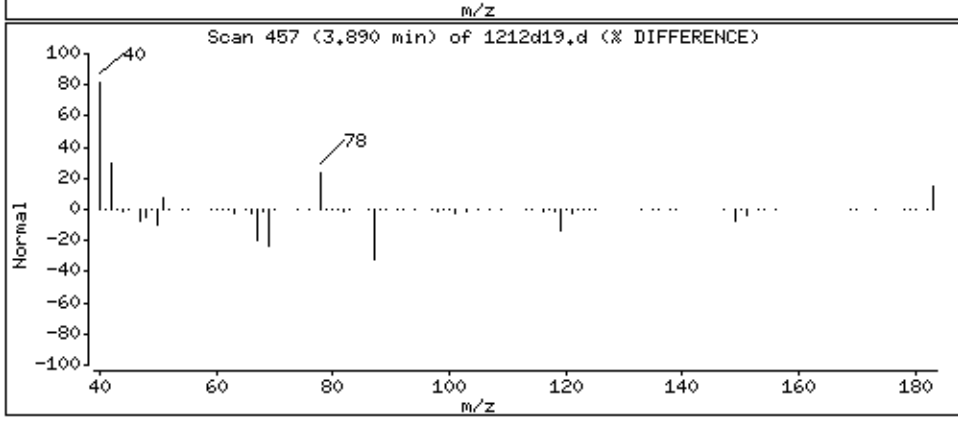
2 Haloether 406

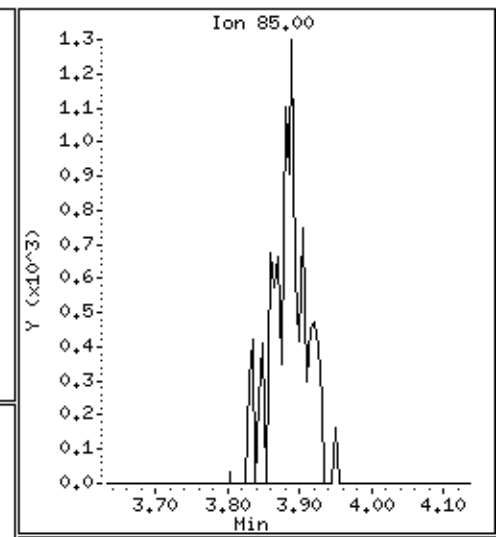
Concentration: 0.424 ug/L

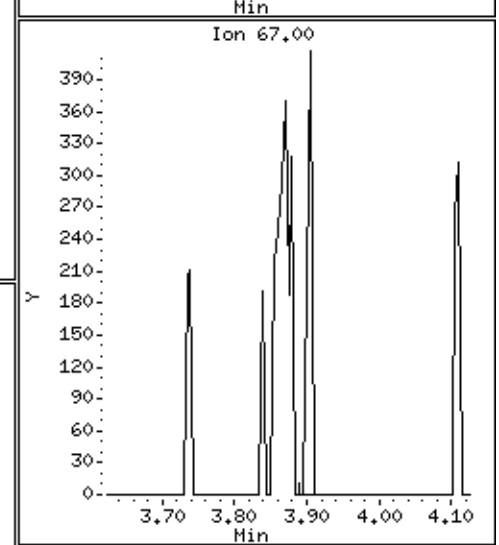


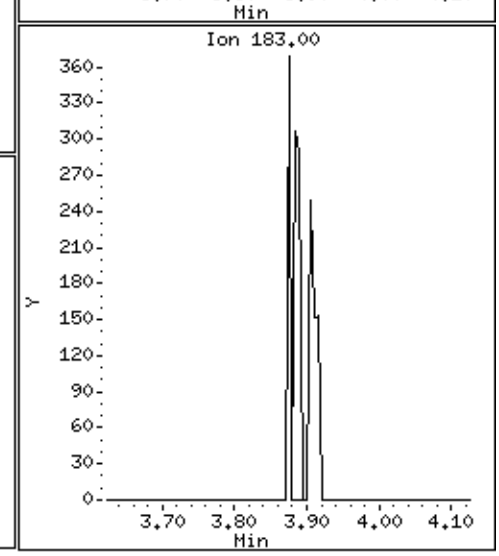












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d19.d

Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

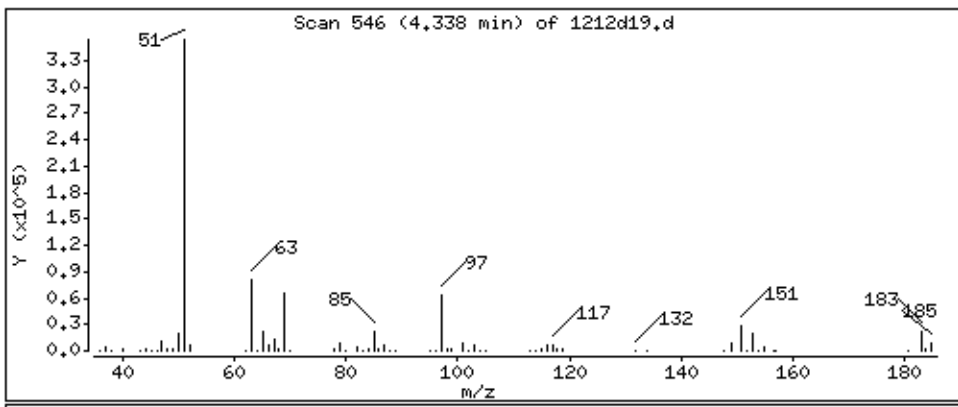
Operator: GEM

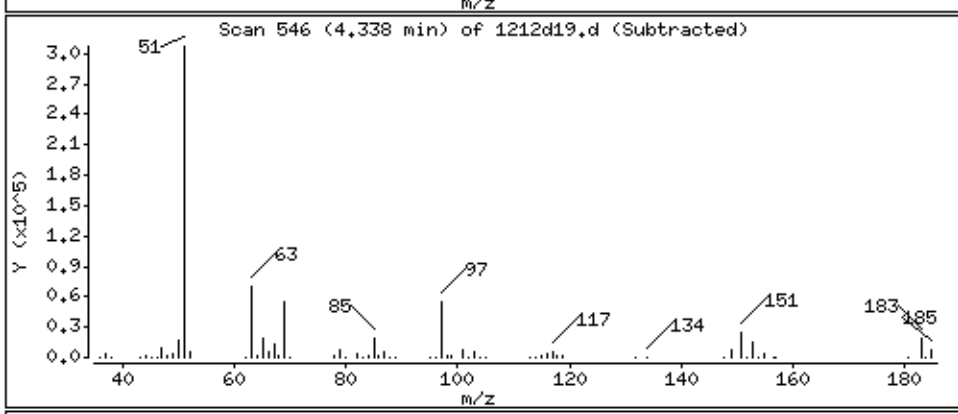
Column phase: DB-624

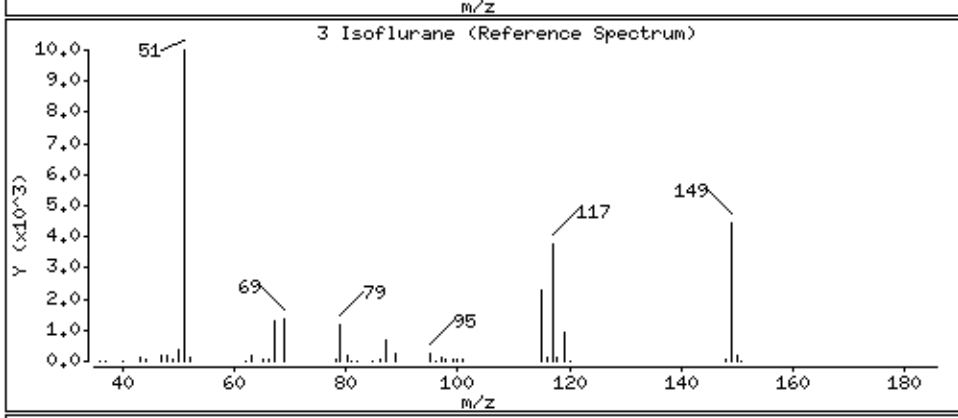
Column diameter: 0.18

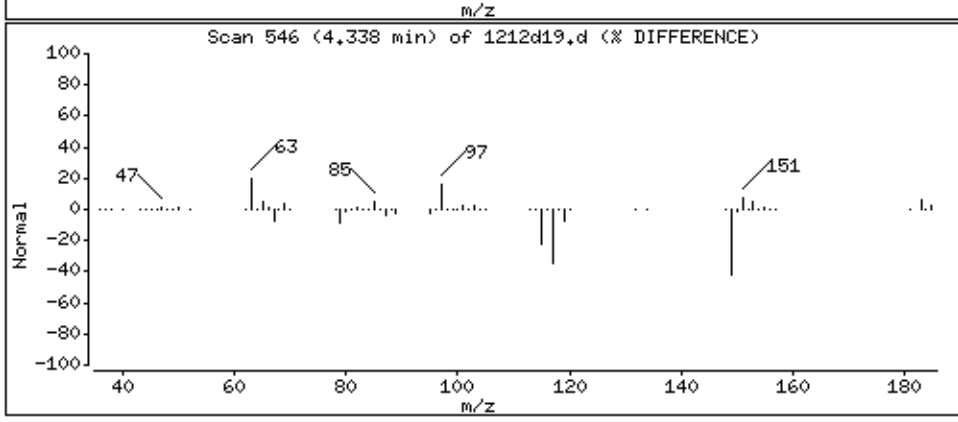
3 Isoflurane

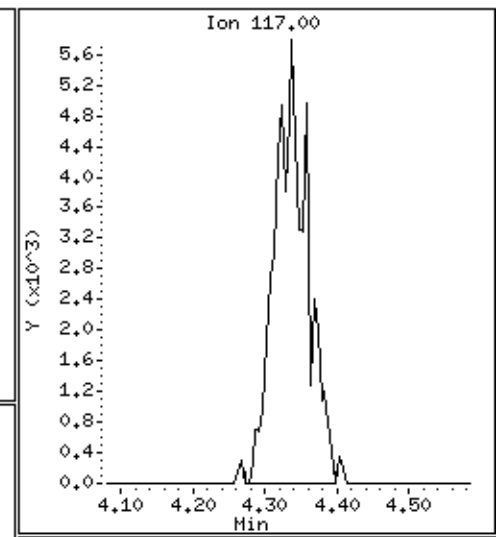
Concentration: 7.16 ug/L

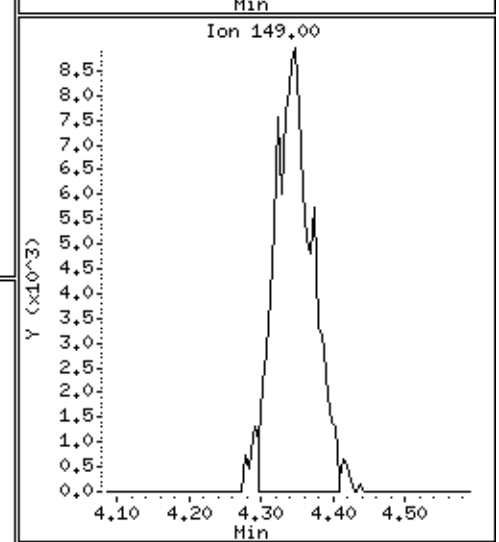


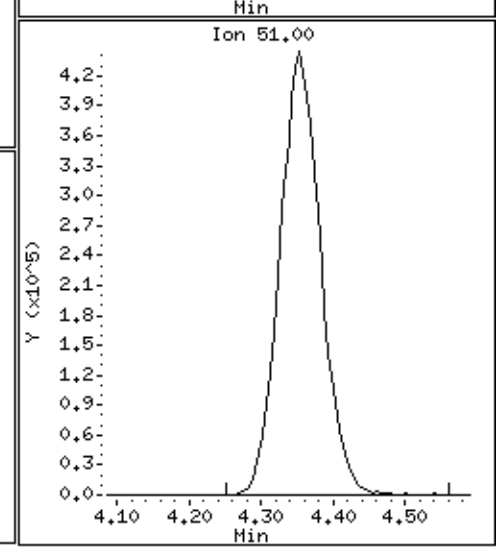












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d19.d

Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

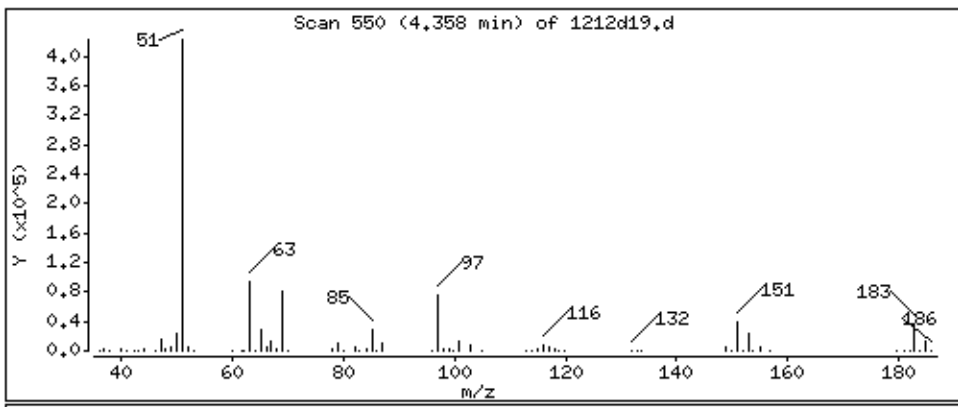
Operator: GEM

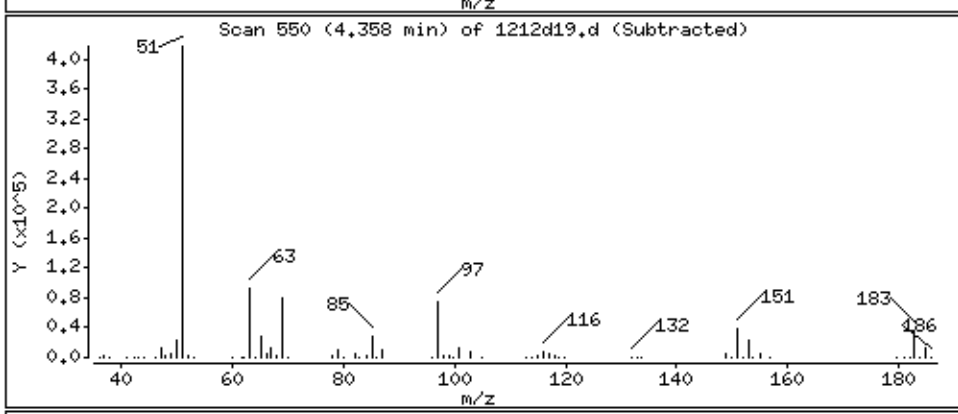
Column phase: DB-624

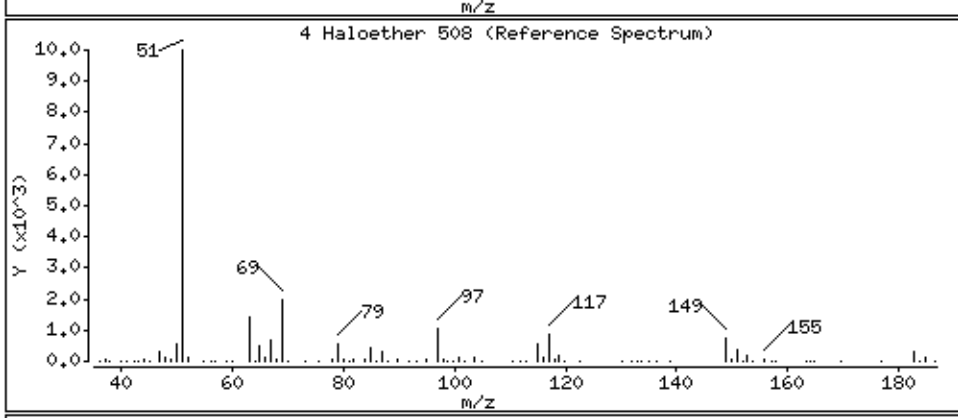
Column diameter: 0.18

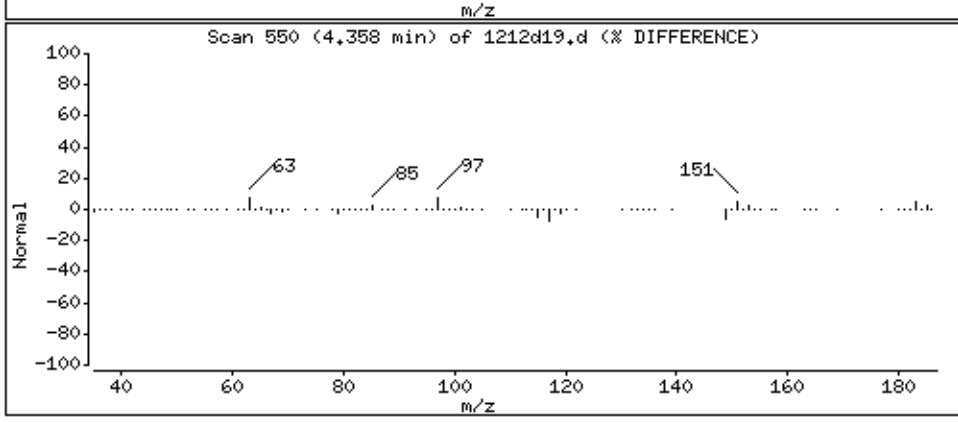
4 Haloether 508

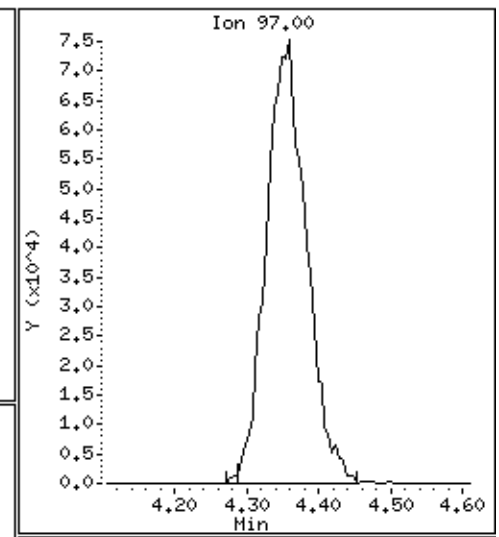
Concentration: 127 ug/L

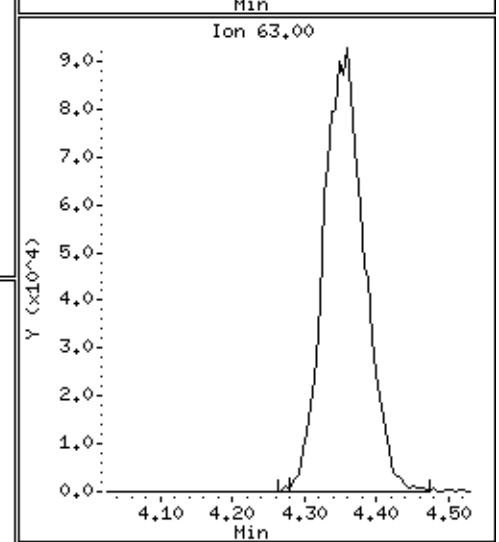


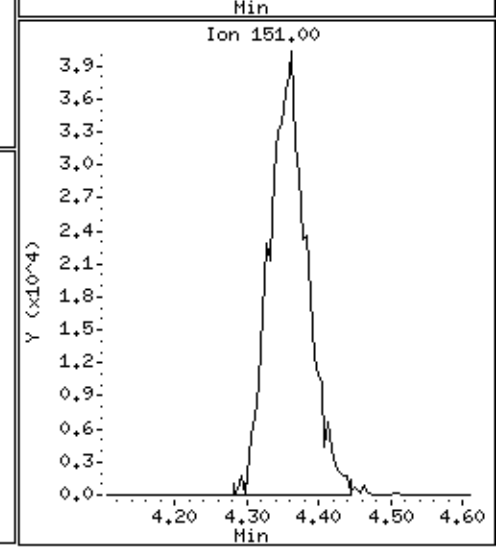












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Date : 12-DEC-2017 14:05

Client ID: MW-1D-3-BP

Instrument: 20msvd.i

Sample Info: 2066645005

Purge Volume: 5.0

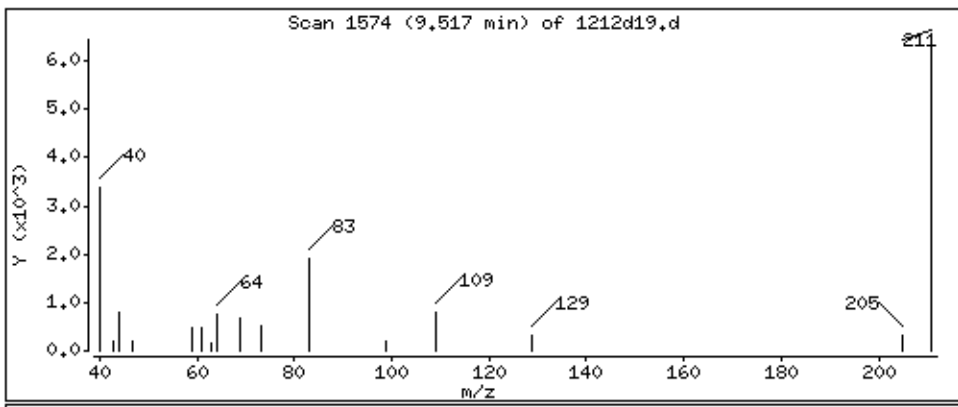
Operator: GEM

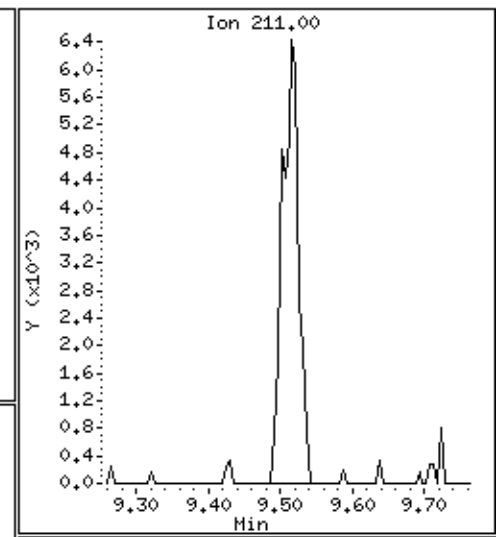
Column phase: DB-624

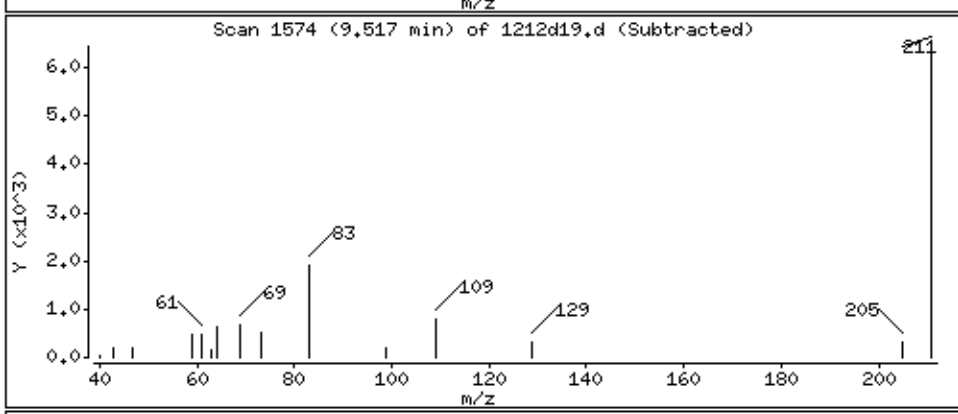
Column diameter: 0.18

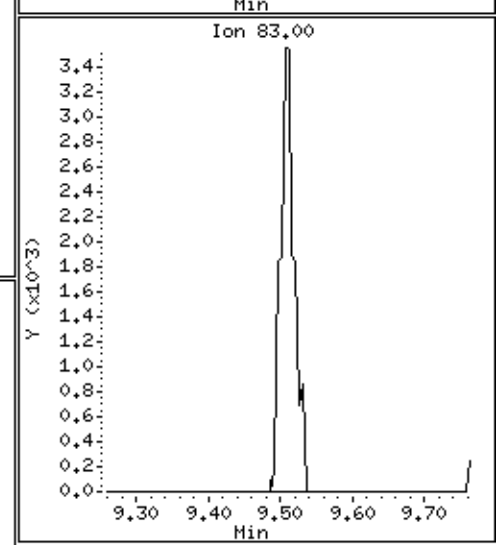
13 Haloether 528

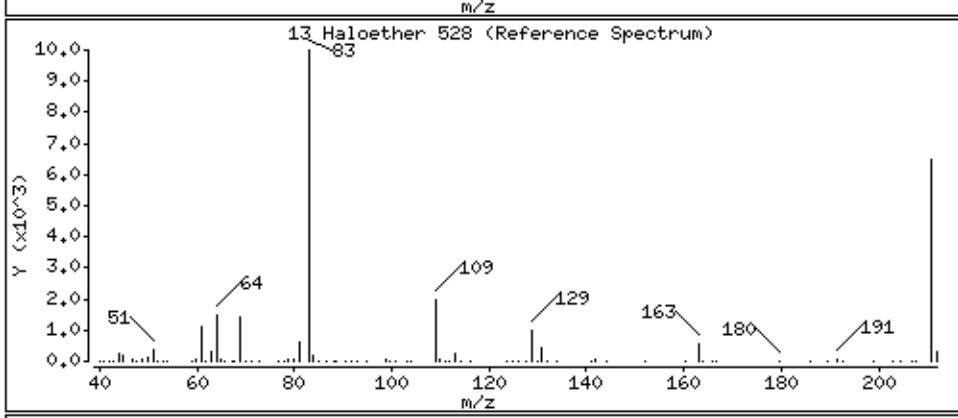
Concentration: 0.752 ug/L

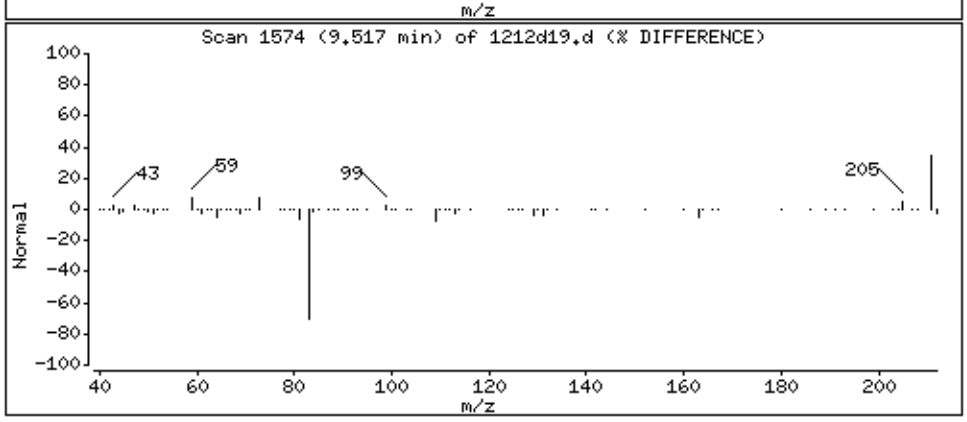












Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d19.d
Injection Date: 12-DEC-2017 14:05
Instrument: 20msvd.i
Lab Sample ID: 2066645005

Compound: Haloether 229 Review Code: LT
CAS Number:

SAMPLE NO.

EB-20171205

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:23
Lab Sample ID: 2066645006
Date Analyzed: 12/12/2017 14:23
Lab File ID: 121217.B\1212D20.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

EB-20171205

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:23
Lab Sample ID: 2066645006
Date Analyzed: 12/12/2017 14:23
Lab File ID: 121217.B\1212D20.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

EB-20171205

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:23
Lab Sample ID: 2066645006
Date Analyzed: 12/12/2017 14:23
Lab File ID: 121217HA.B\1212D20.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d20.d
Lab Smp Id: 2066645006 Client Smp ID: EB-20171205
Inj Date : 12-DEC-2017 14:23
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645006
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	4.035	4.045	(0.607)	1939	0.43504	0.435(M)	
14 Acetone	43	4.151	4.146	(0.624)	5366	3.67732	3.68	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	317046	50.0955	50.1	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	287476	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	911677	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1007408	49.3865	49.4	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	385751	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	374973	50.7412	50.7	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	373694	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d20.d
Lab Smp Id: 2066645006 Client Smp ID: EB-20171205
Inj Date : 12-DEC-2017 14:23
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645006
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

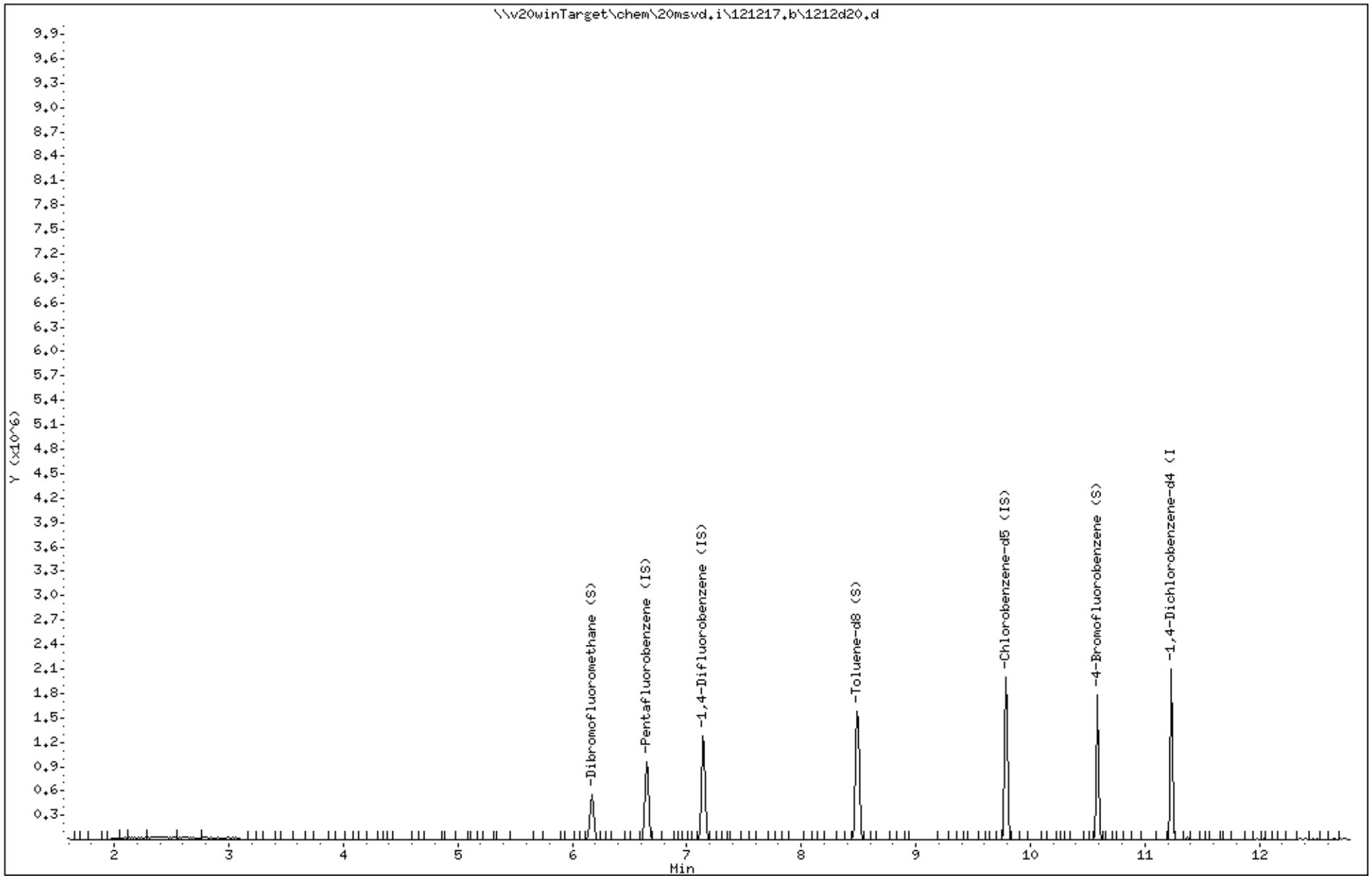
Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	287476	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	911677	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	385751	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	373694	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d20.d
Date : 12-DEC-2017 14:23
Client ID: EB-20171205
Sample Info: 2066645006
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d20.d

Date : 12-DEC-2017 14:23

Client ID: EB-20171205

Instrument: 20msvd.i

Sample Info: 2066645006

Purge Volume: 5.0

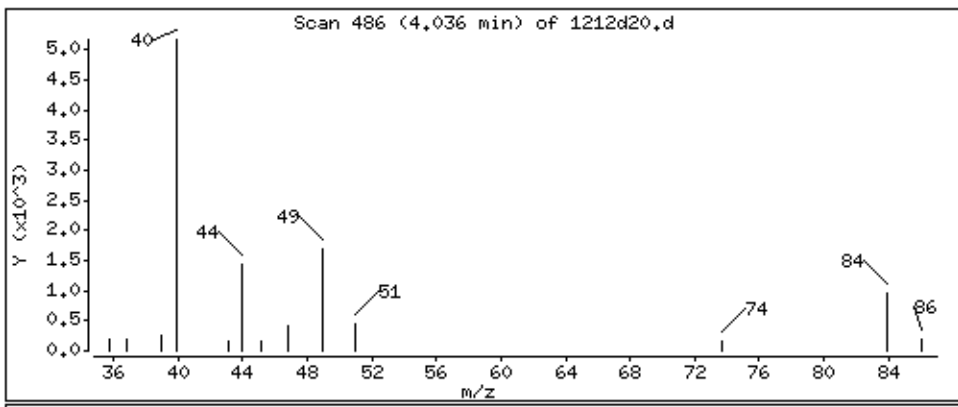
Operator: GEM

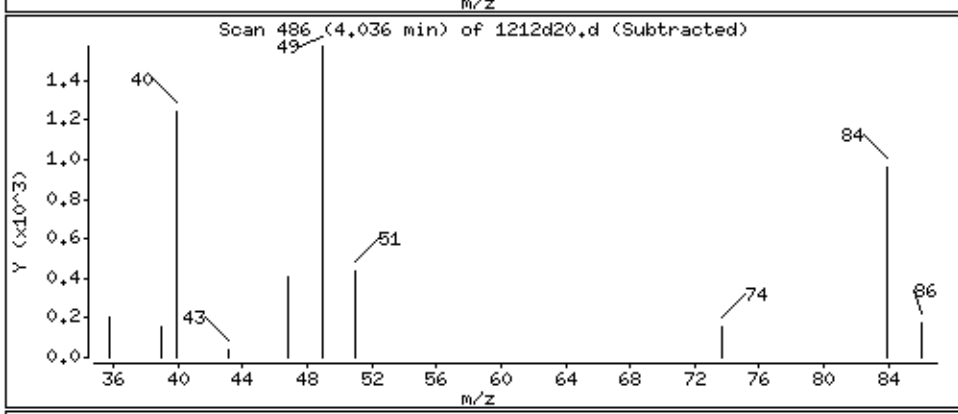
Column phase: RTX VMS 30m

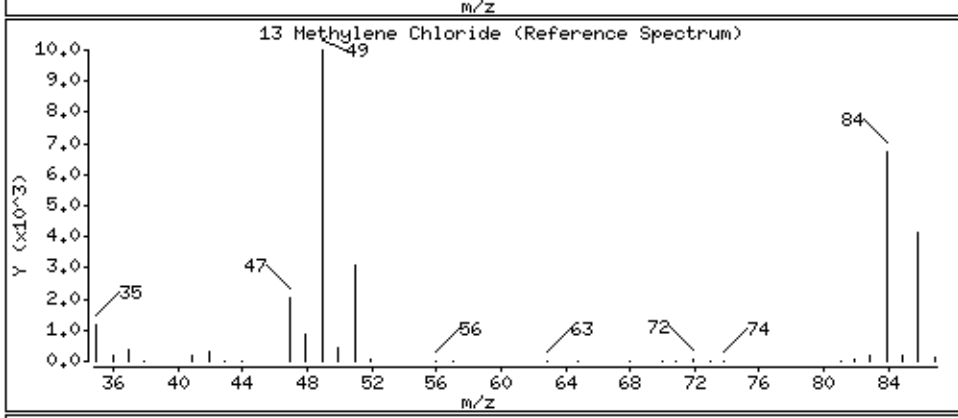
Column diameter: 0.25

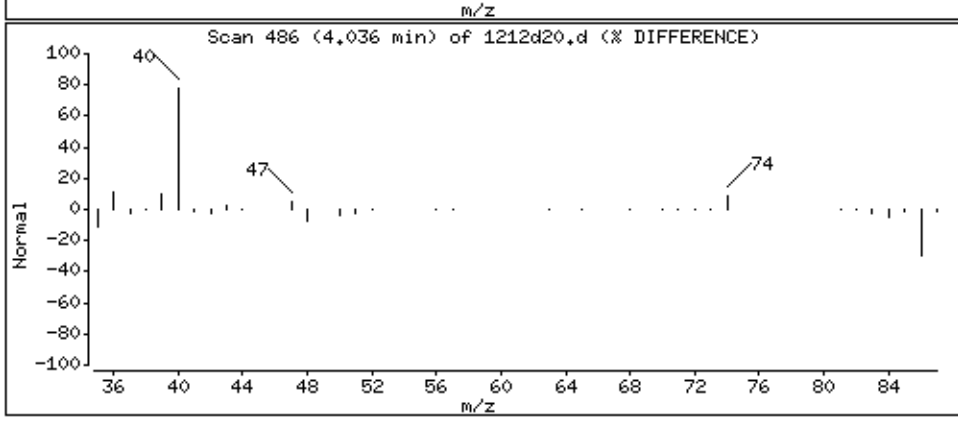
13 Methylene Chloride

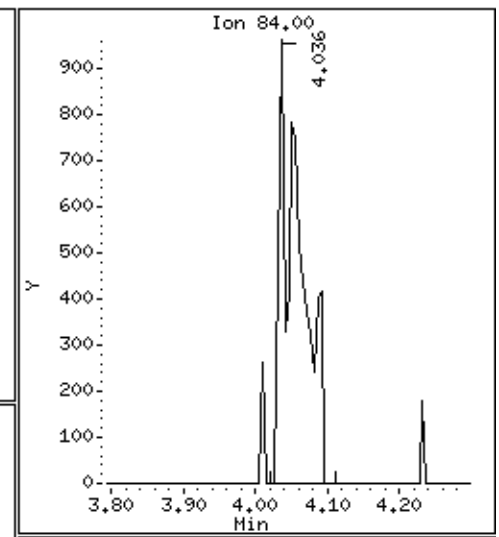
Concentration: 0.435 ug/L

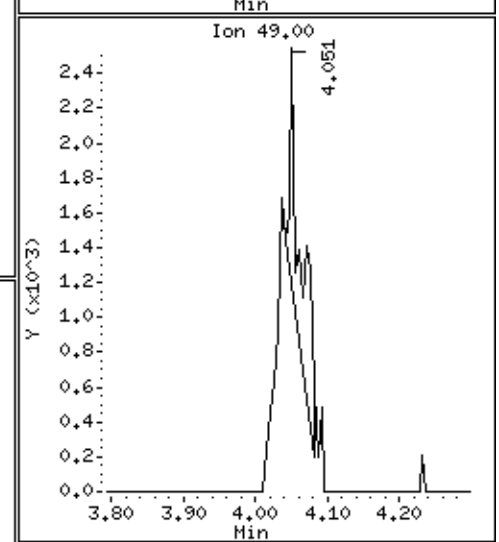


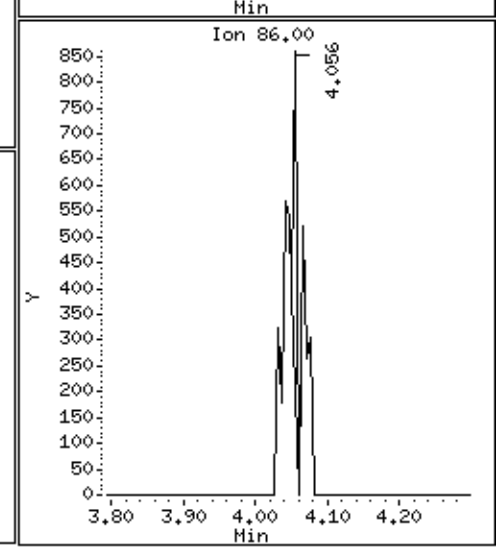












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d20.d

Date : 12-DEC-2017 14:23

Client ID: EB-20171205

Instrument: 20msvd.i

Sample Info: 2066645006

Purge Volume: 5.0

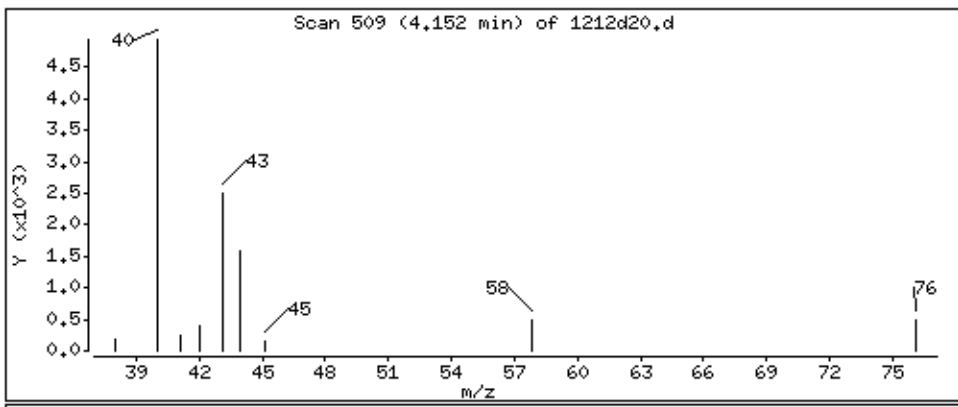
Operator: GEM

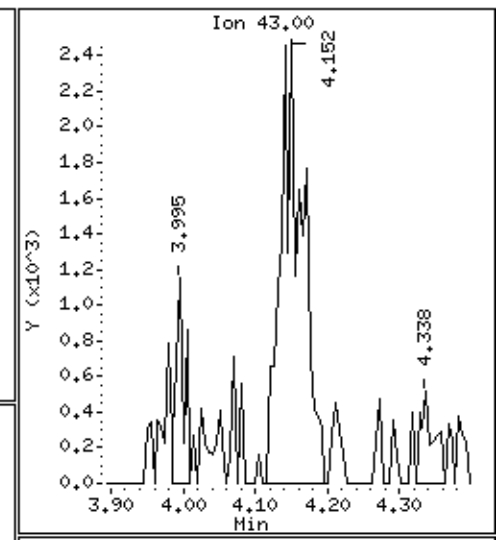
Column phase: RTX VMS 30m

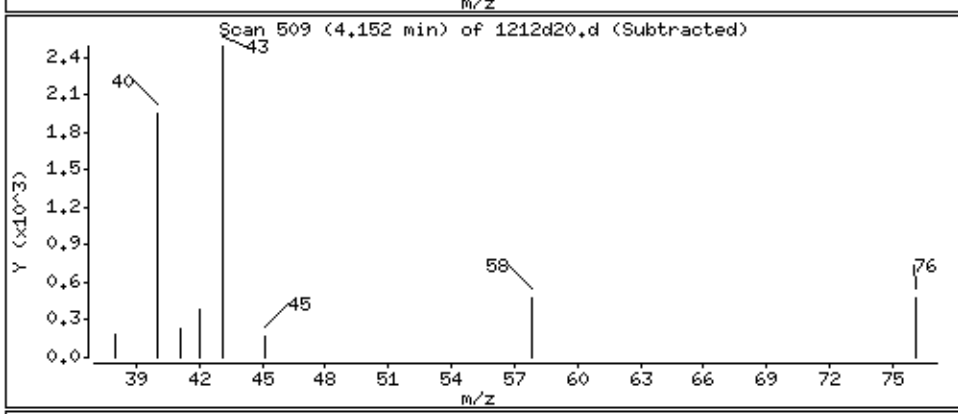
Column diameter: 0.25

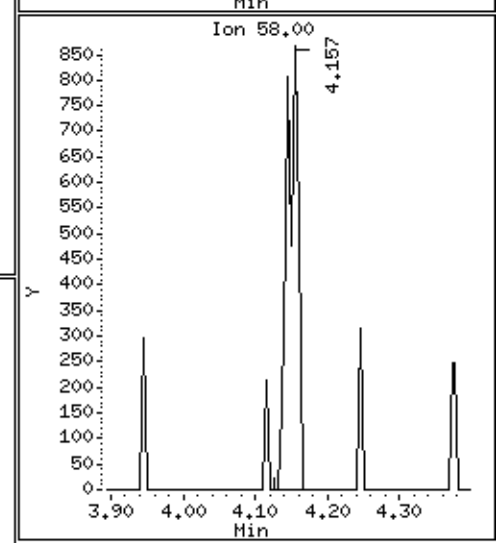
14 Acetone

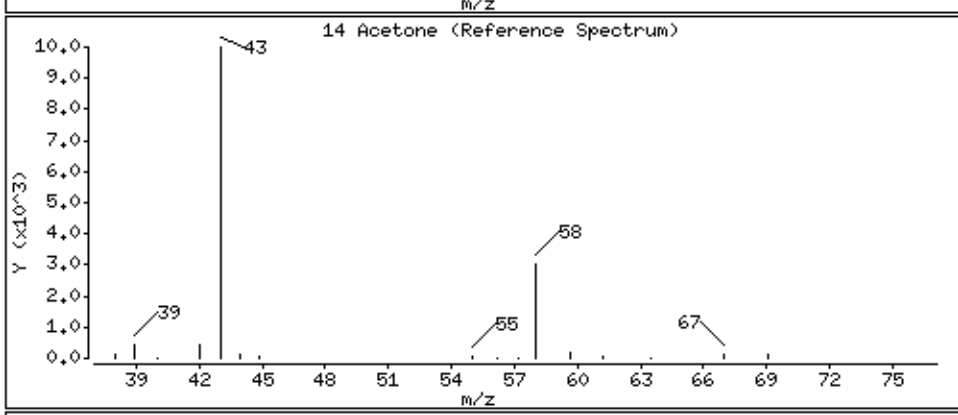
Concentration: 3.68 ug/L

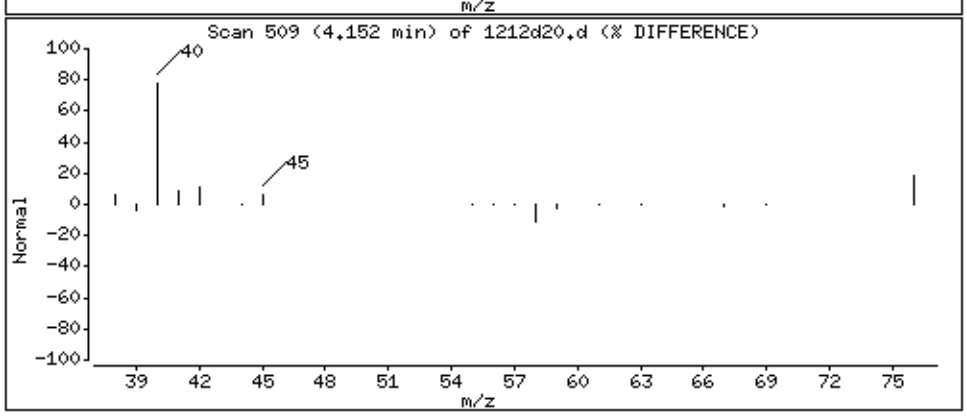






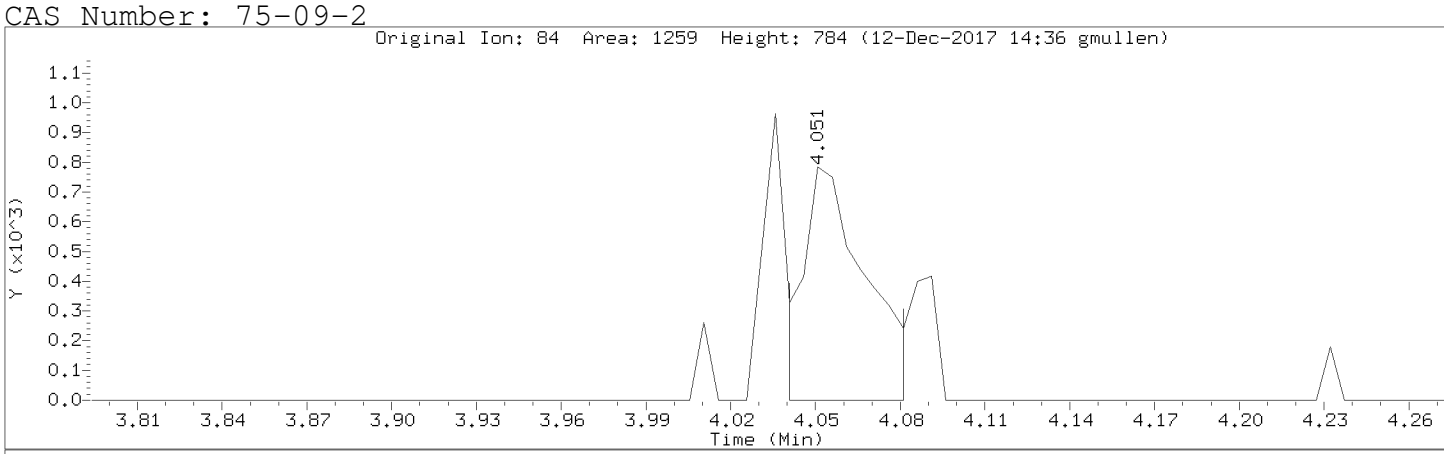


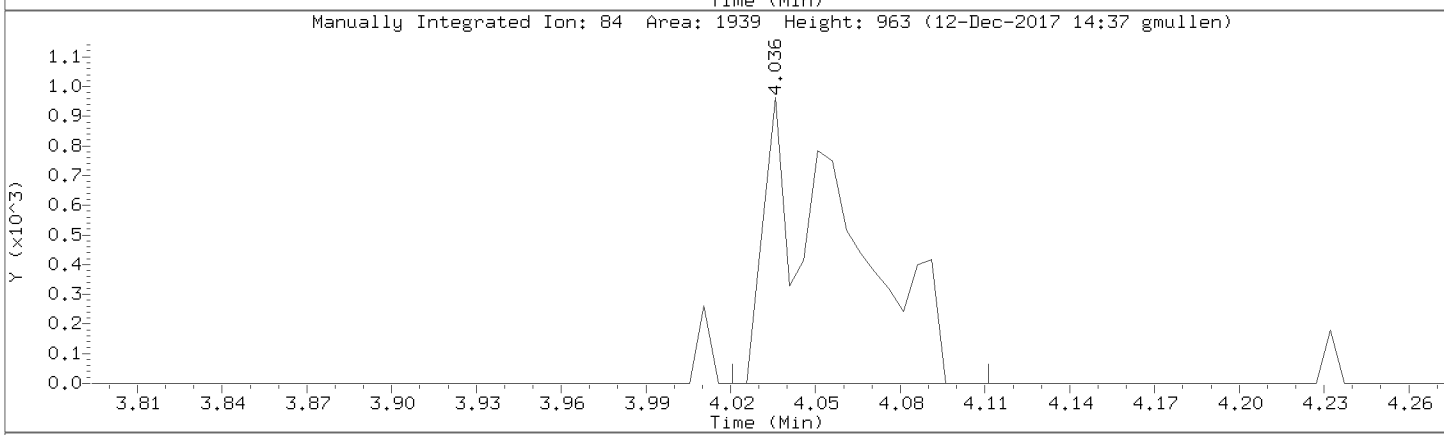


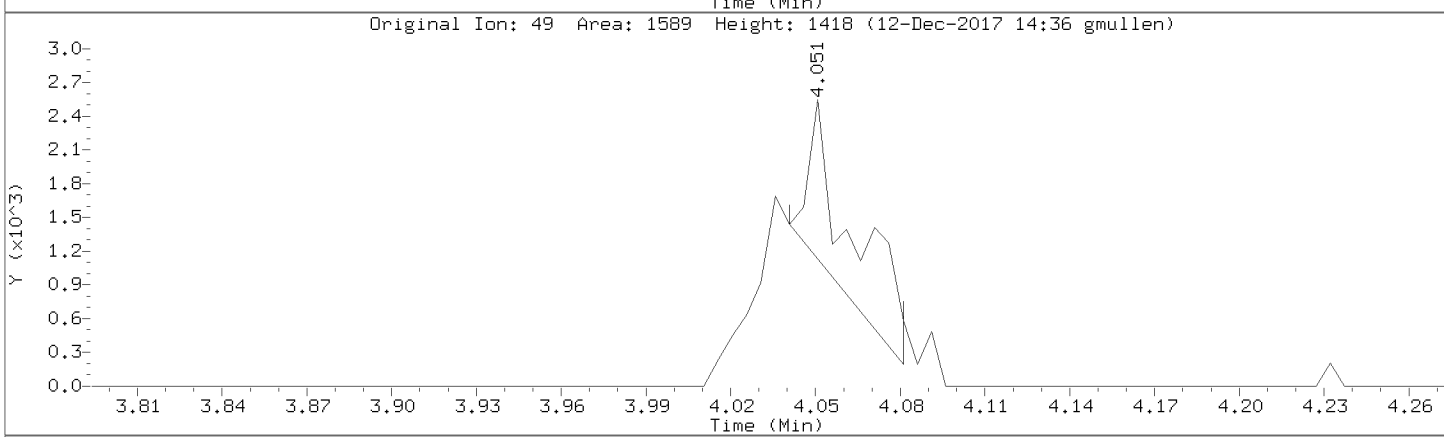


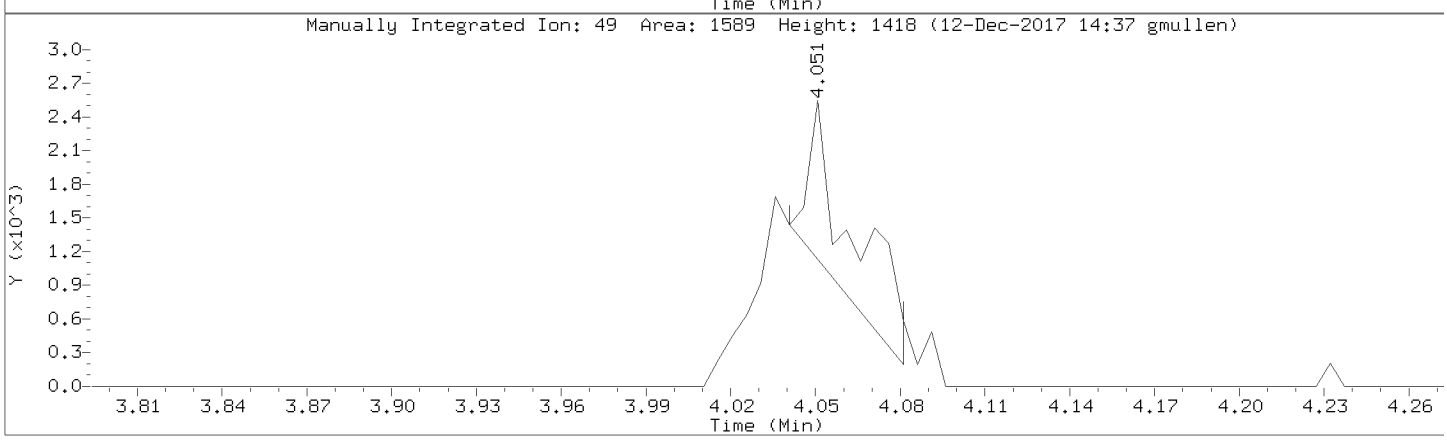
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d20.d
Injection Date: 12-DEC-2017 14:23
Instrument: 20msvd.i
Lab Sample ID: 2066645006

Compound: Methylene Chloride Review Code: LT
CAS Number: 75-09-2

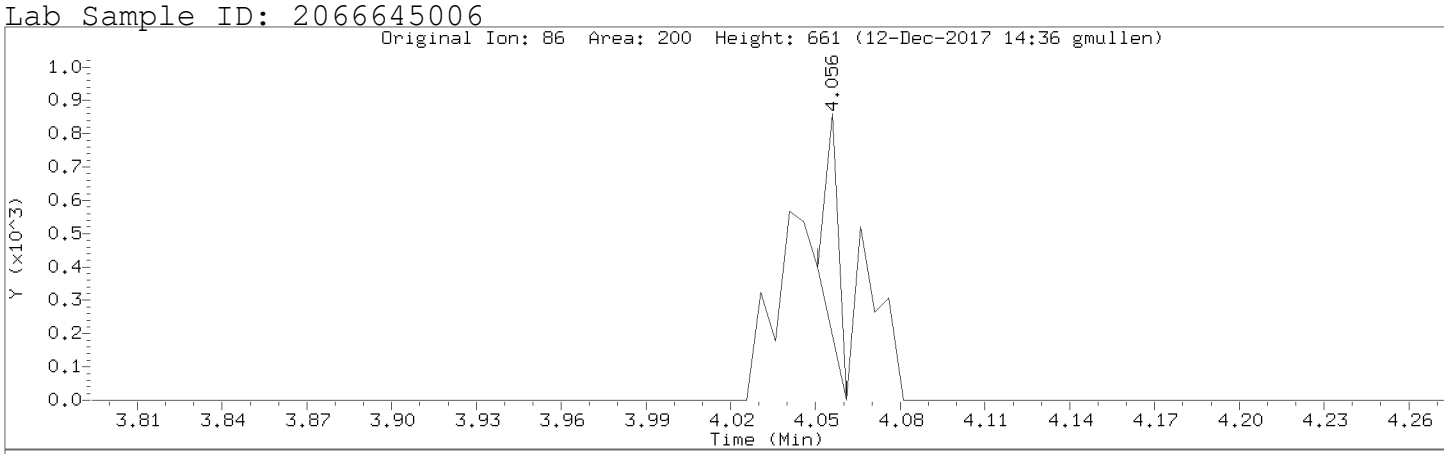


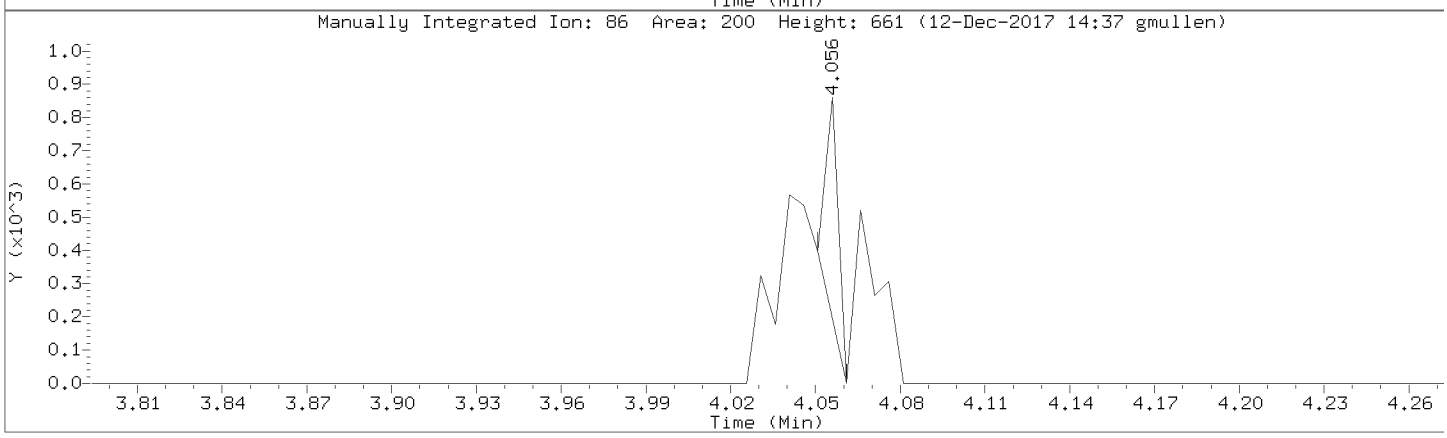






Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d20.d
Injection Date: 12-DEC-2017 14:23
Instrument: 20msvd.i
Lab Sample ID: 2066645006





Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d20.d

Date : 12-DEC-2017 14:23

Client ID: EB-20171205

Instrument: 20msvd.i

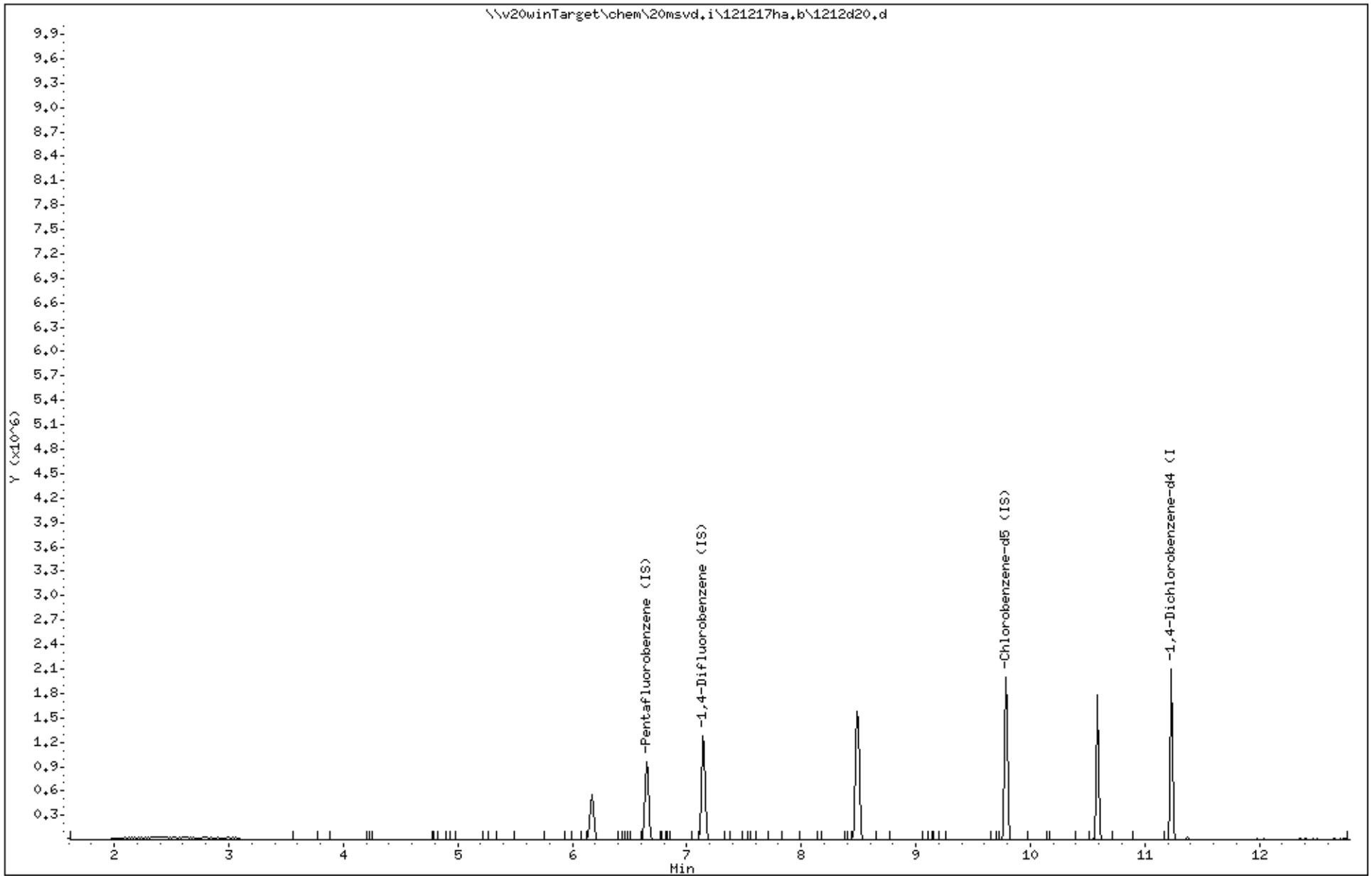
Sample Info: 2066645006

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d20.d
Injection Date: 12-DEC-2017 14:23
Instrument: 20msvd.i
Lab Sample ID: 2066645006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

FB-20171205

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:41
Lab Sample ID: 2066645007
Date Analyzed: 12/12/2017 14:41
Lab File ID: 121217.B\1212D21.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.1	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

FB-20171205

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:41
Lab Sample ID: 2066645007
Date Analyzed: 12/12/2017 14:41
Lab File ID: 121217.B\1212D21.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

FB-20171205

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:41
Lab Sample ID: 2066645007
Date Analyzed: 12/12/2017 14:41
Lab File ID: 121217HA.B\1212D21.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d21.d
Lab Smp Id: 2066645007 Client Smp ID: FB-20171205
Inj Date : 12-DEC-2017 14:41
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645007
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	275762	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	892050	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.784	9.788	(1.000)	375326	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	362236	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d21.d
Lab Smp Id: 2066645007 Client Smp ID: FB-20171205
Inj Date : 12-DEC-2017 14:41
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645007
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	4.066	4.045	(0.611)	1992	0.46012	0.460(M)	
14 Acetone	43	4.162	4.146	(0.626)	5734	4.10717	4.11(M)	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.172	6.171	(0.928)	307291	50.6167	50.6	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	275762	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	892050	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	986979	49.4495	49.4	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.784	9.788	(1.000)	375326	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.585	10.584	(0.943)	371613	51.8772	51.9	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

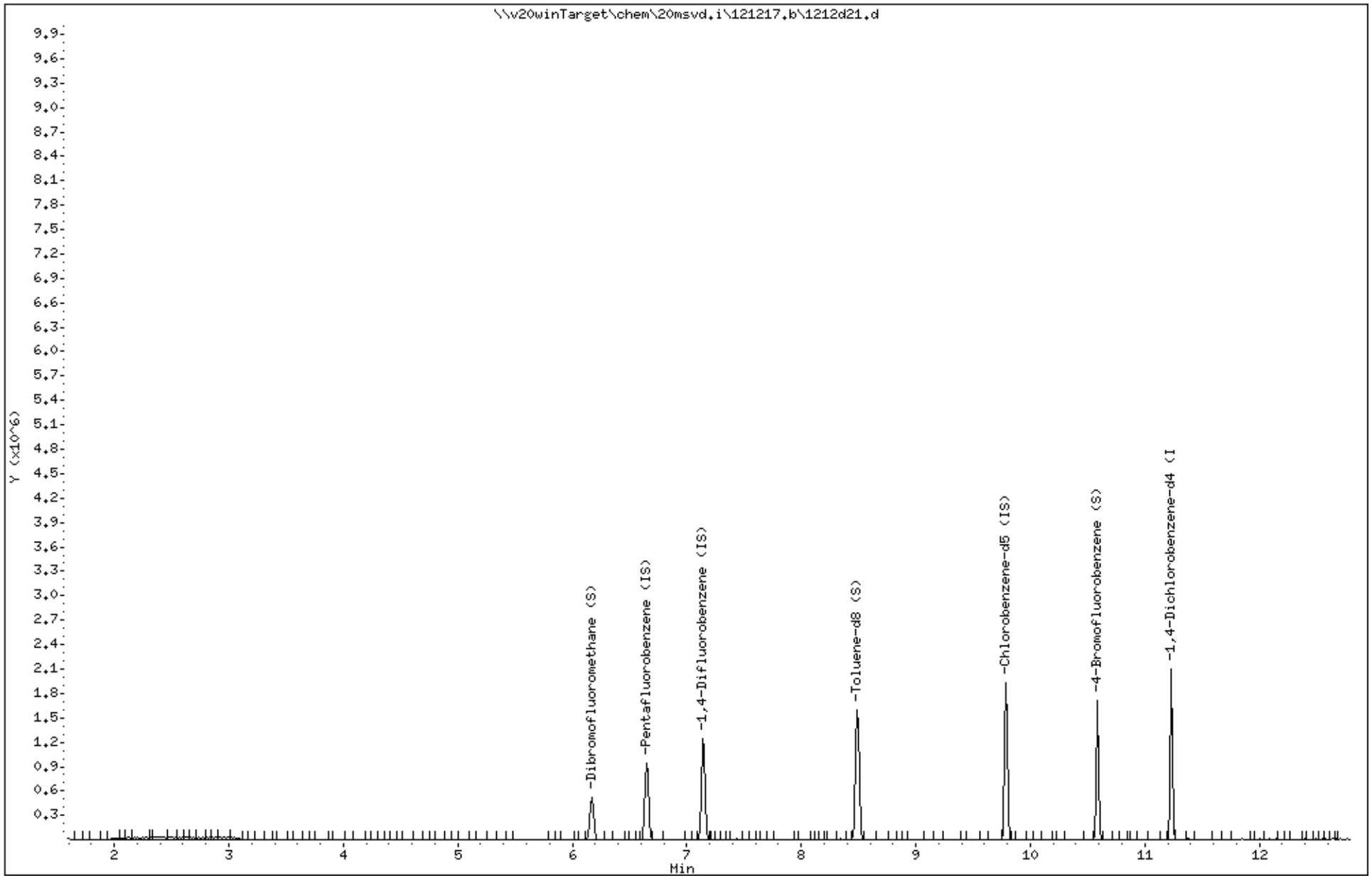
	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
	77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	78 1,2,3-Trichloropropane	110	Compound Not Detected.						
	79 4-Chlorotoluene	91	Compound Not Detected.						
	80 tert-Butylbenzene	91	Compound Not Detected.						
	81 Pentachloroethane	167	Compound Not Detected.						
	82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	83 sec-Butylbenzene	105	Compound Not Detected.						
	84 p-Isopropyltoluene	119	Compound Not Detected.						
	85 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	86 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	362236	50.0000		
	87 1,4-Dichlorobenzene	146	Compound Not Detected.						
	88 n-Butylbenzene	91	Compound Not Detected.						(D
	89 1,2-Dichlorobenzene	146	Compound Not Detected.						
	90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
	91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	93 Naphthalene	128	Compound Not Detected.						
	94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d21.d
Date : 12-DEC-2017 14:41
Client ID: FB-20171205
Sample Info: 2066645007
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d21.d

Date : 12-DEC-2017 14:41

Client ID: FB-20171205

Instrument: 20msvd.i

Sample Info: 2066645007

Purge Volume: 5.0

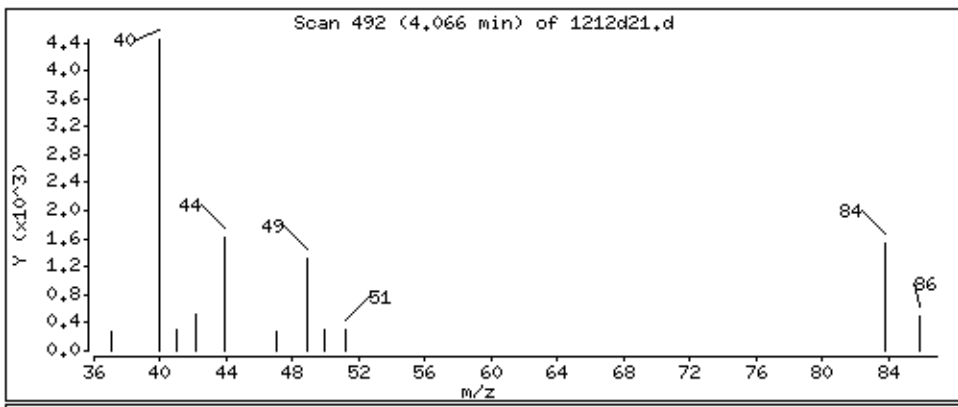
Operator: GEM

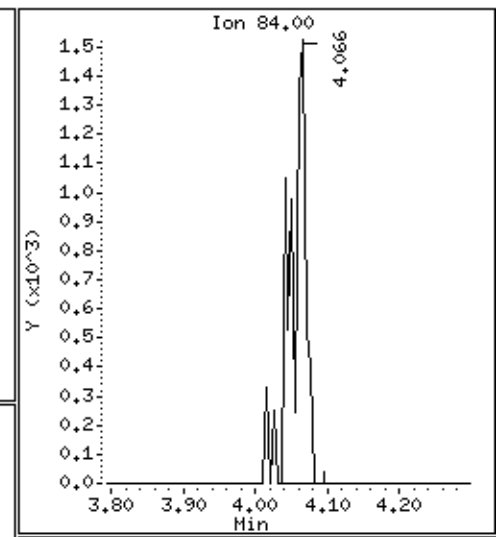
Column phase: RTX VMS 30m

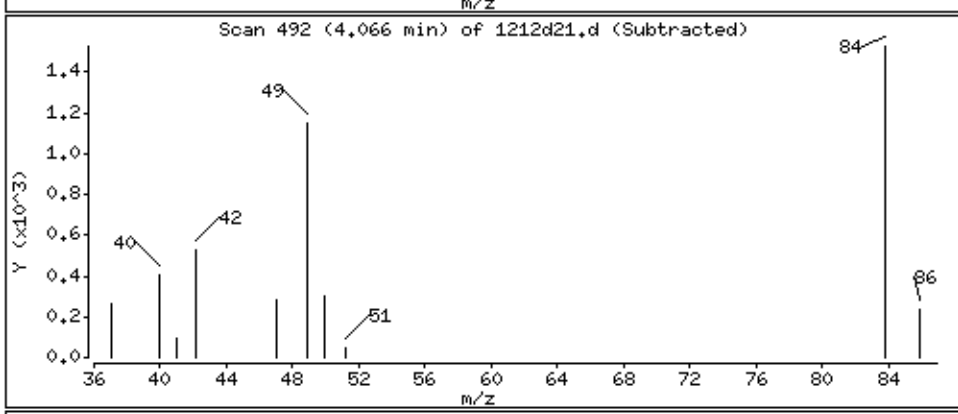
Column diameter: 0.25

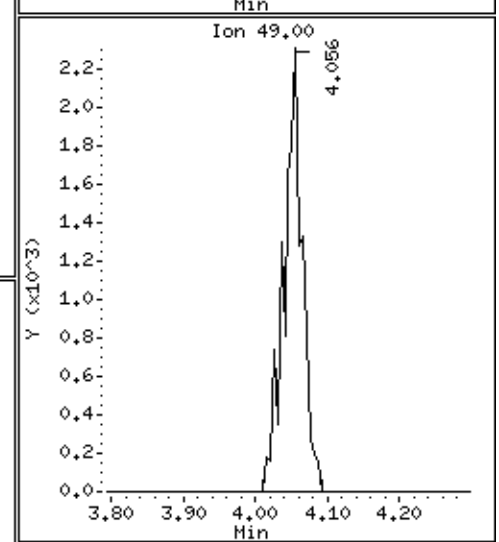
13 Methylene Chloride

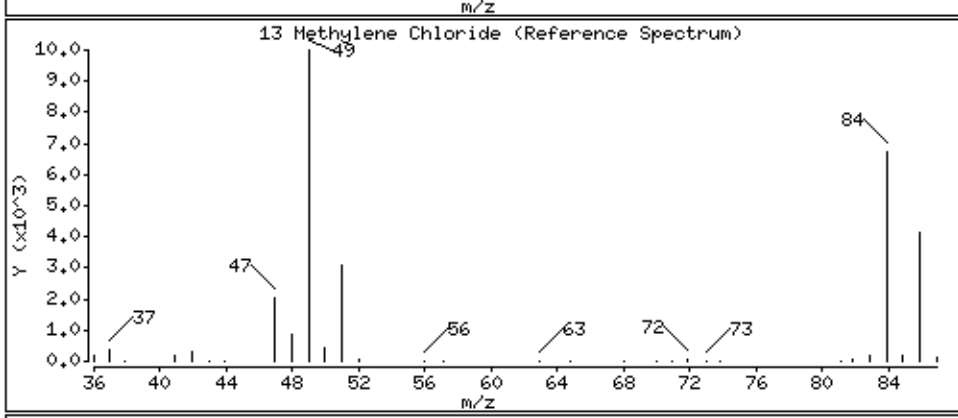
Concentration: 0.460 ug/L

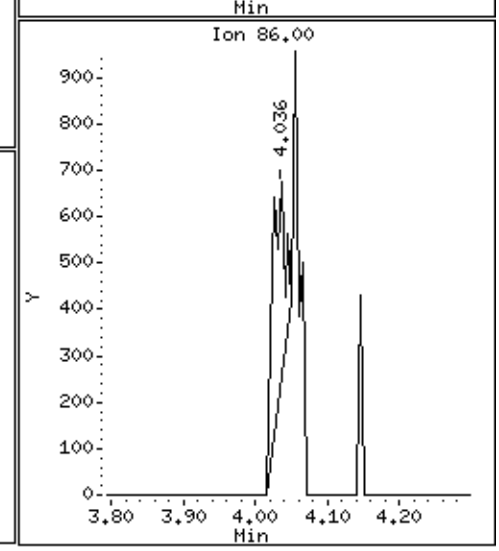


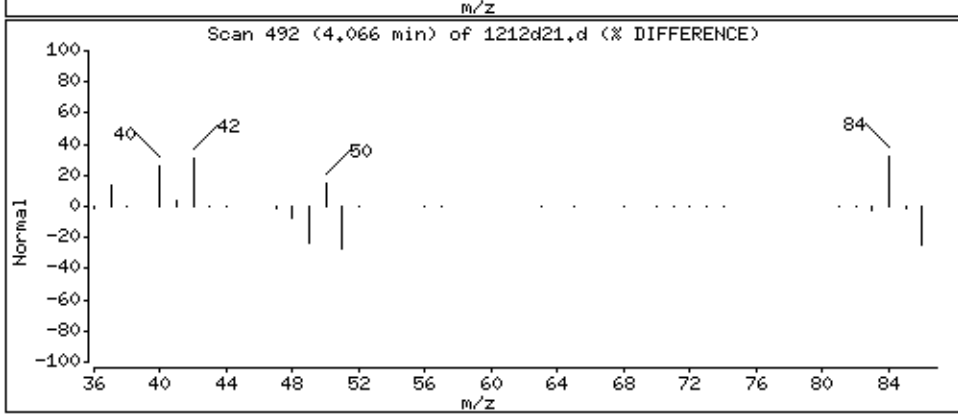












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d21.d

Date : 12-DEC-2017 14:41

Client ID: FB-20171205

Instrument: 20msvd.i

Sample Info: 2066645007

Purge Volume: 5.0

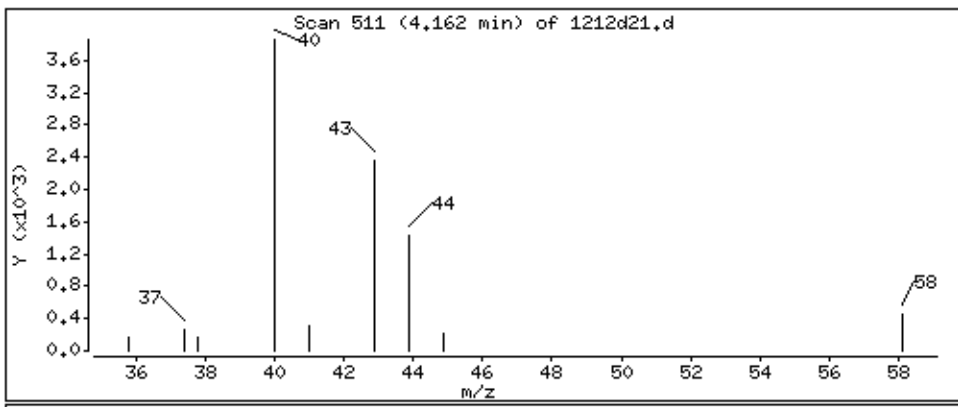
Operator: GEM

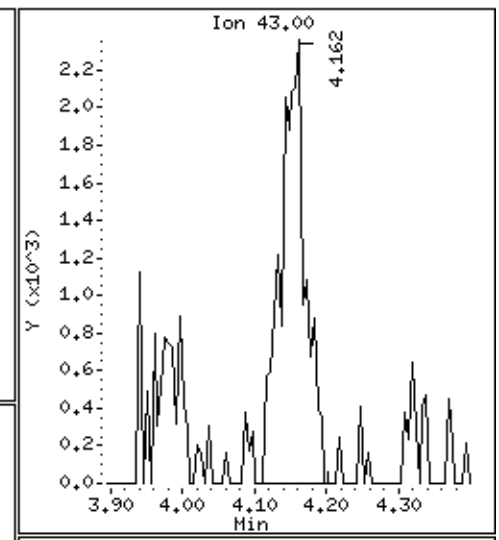
Column phase: RTX VMS 30m

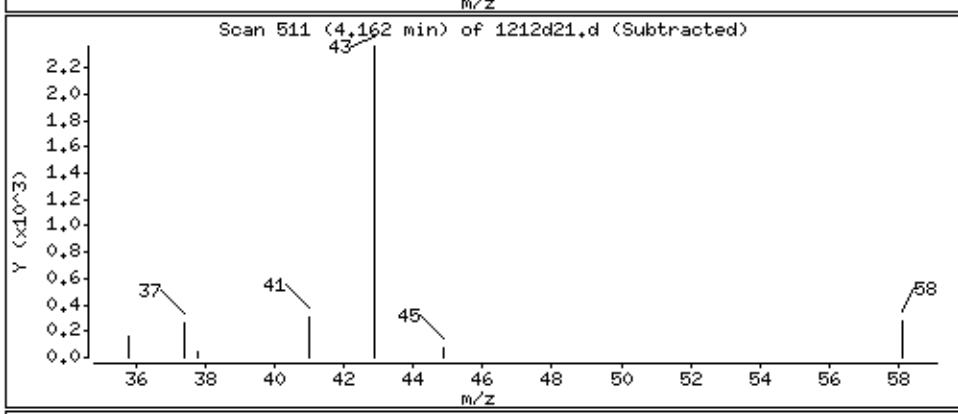
Column diameter: 0.25

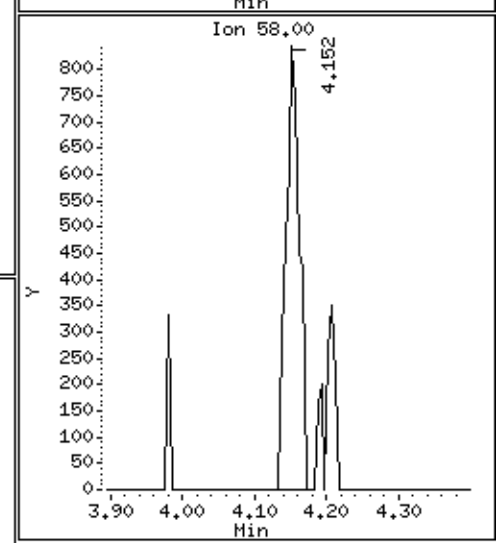
14 Acetone

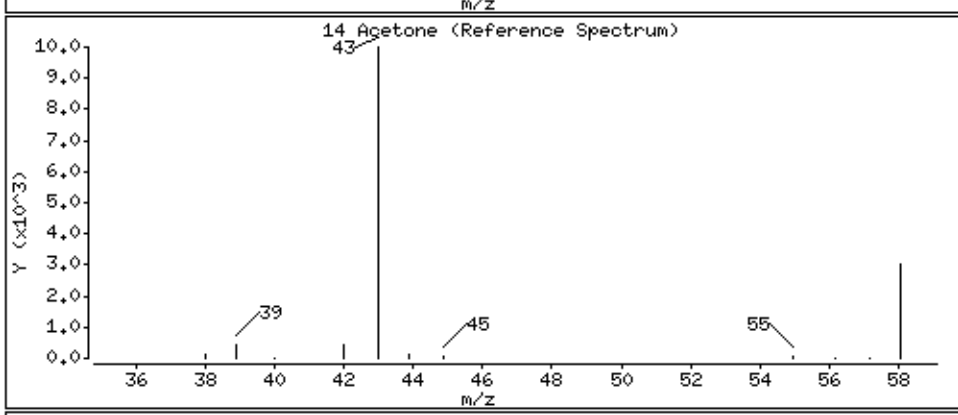
Concentration: 4.11 ug/L

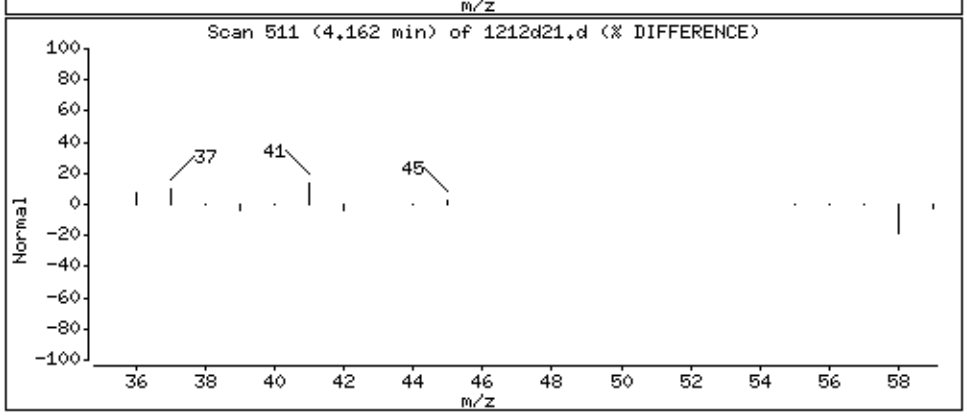






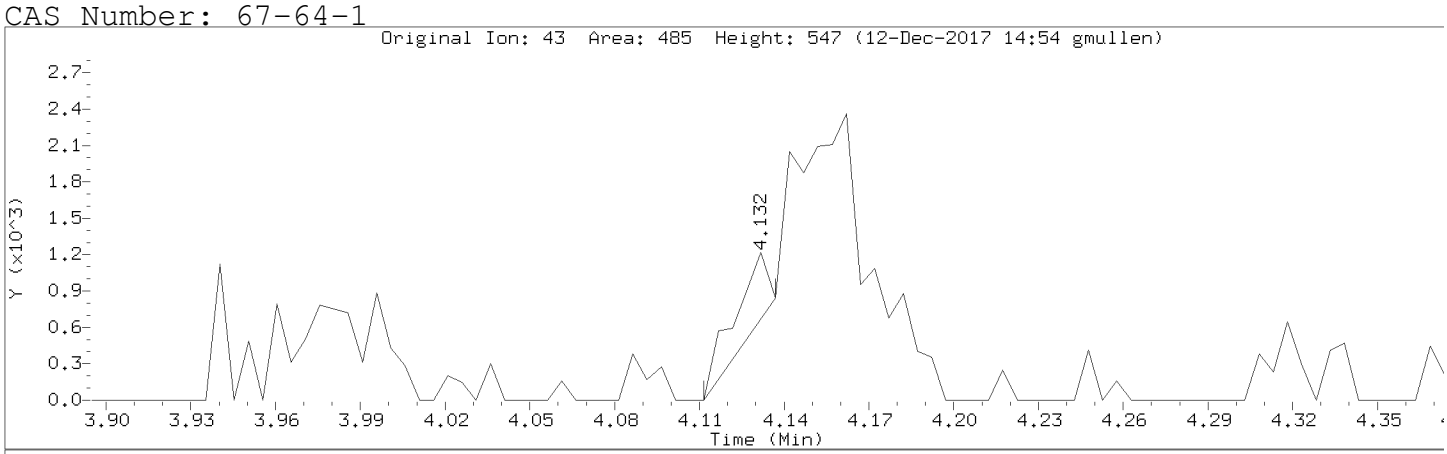


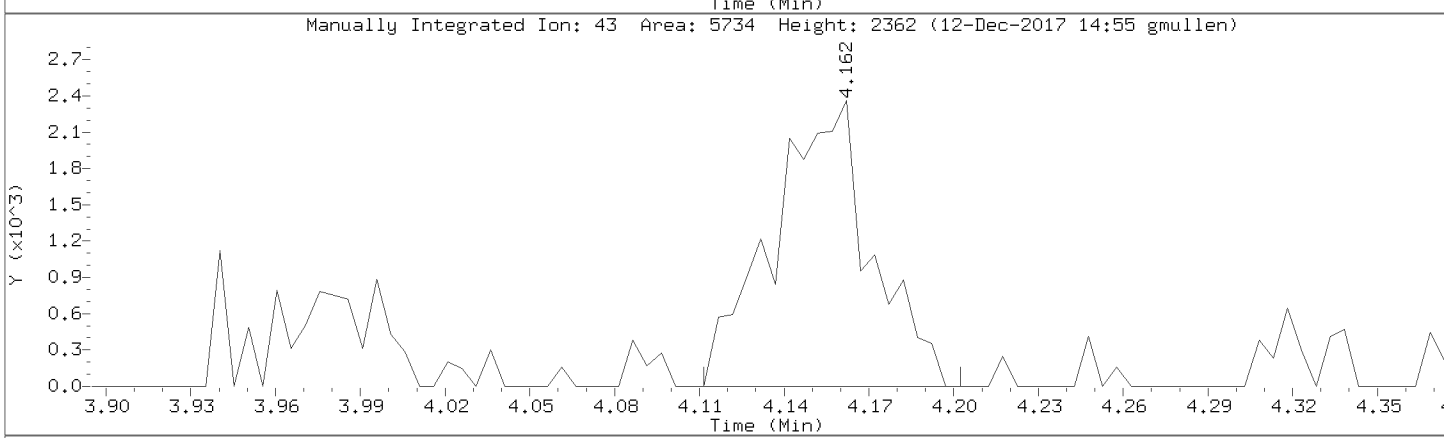


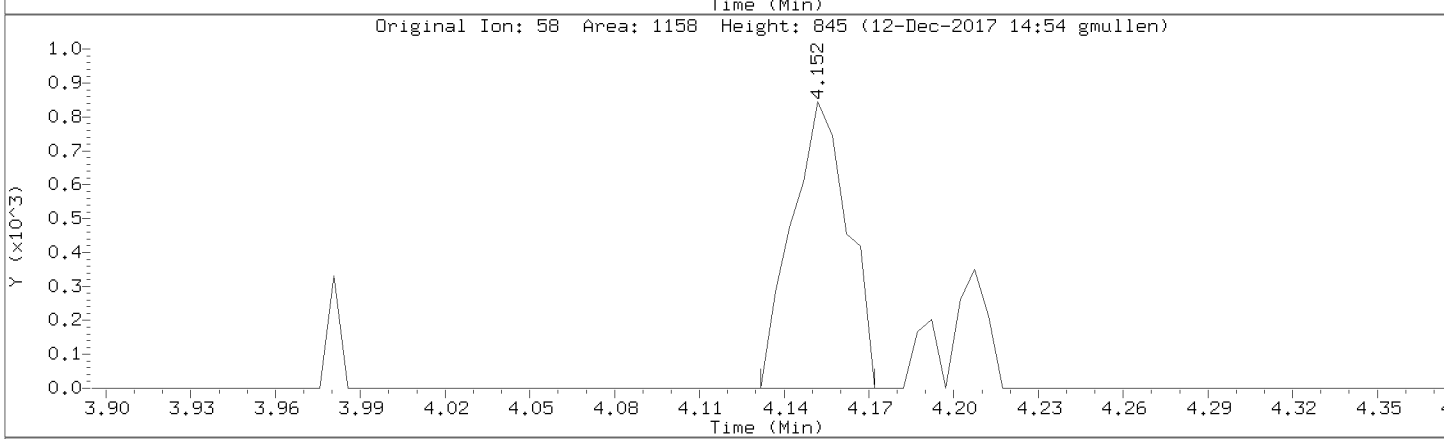


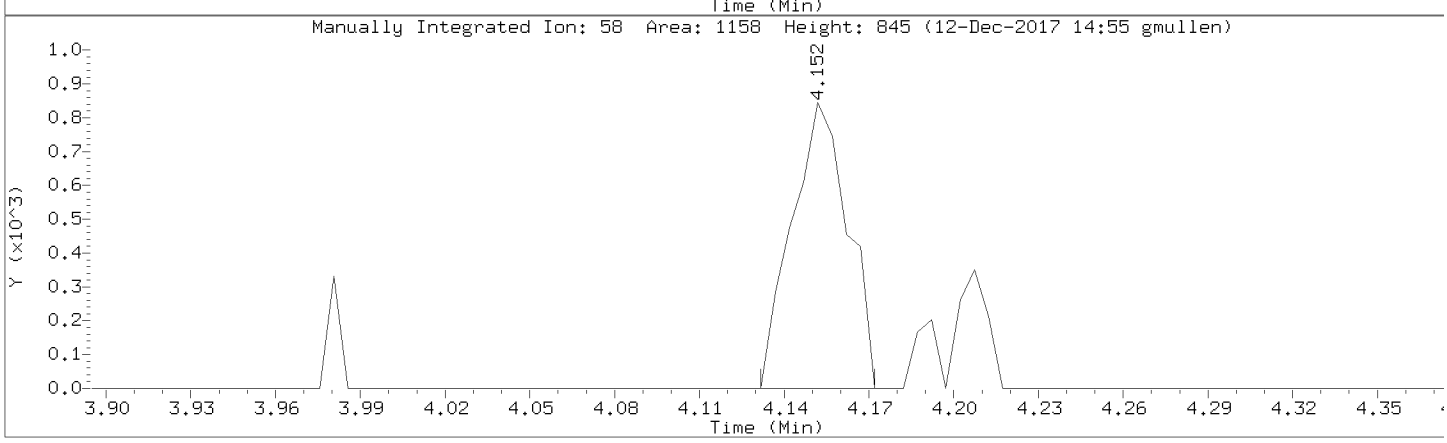
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d21.d
Injection Date: 12-DEC-2017 14:41
Instrument: 20msvd.i
Lab Sample ID: 2066645007

Compound: Acetone Review Code: LT
CAS Number: 67-64-1



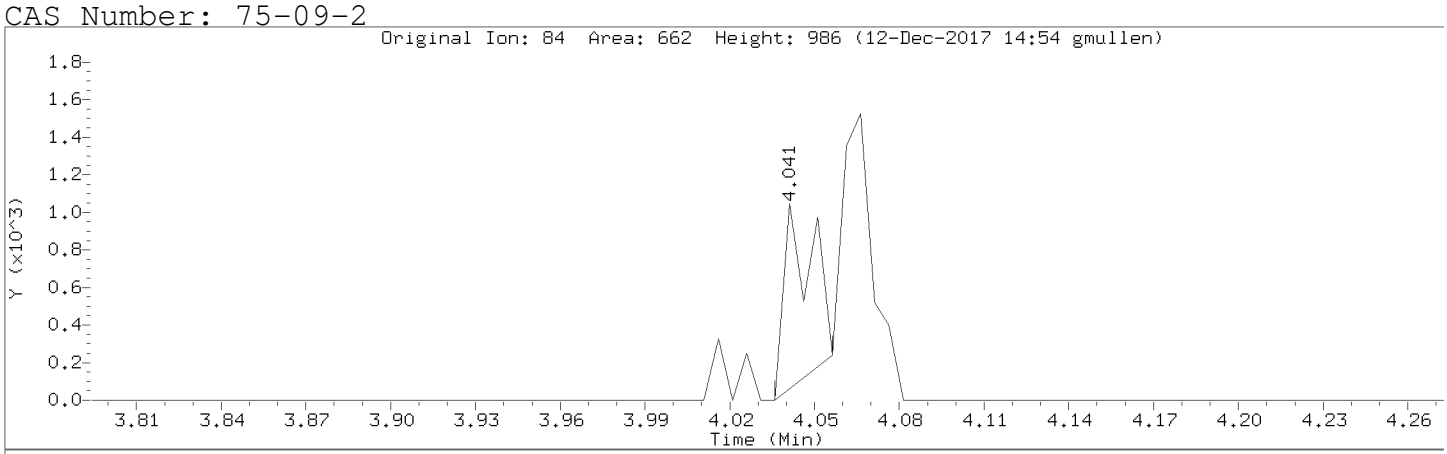


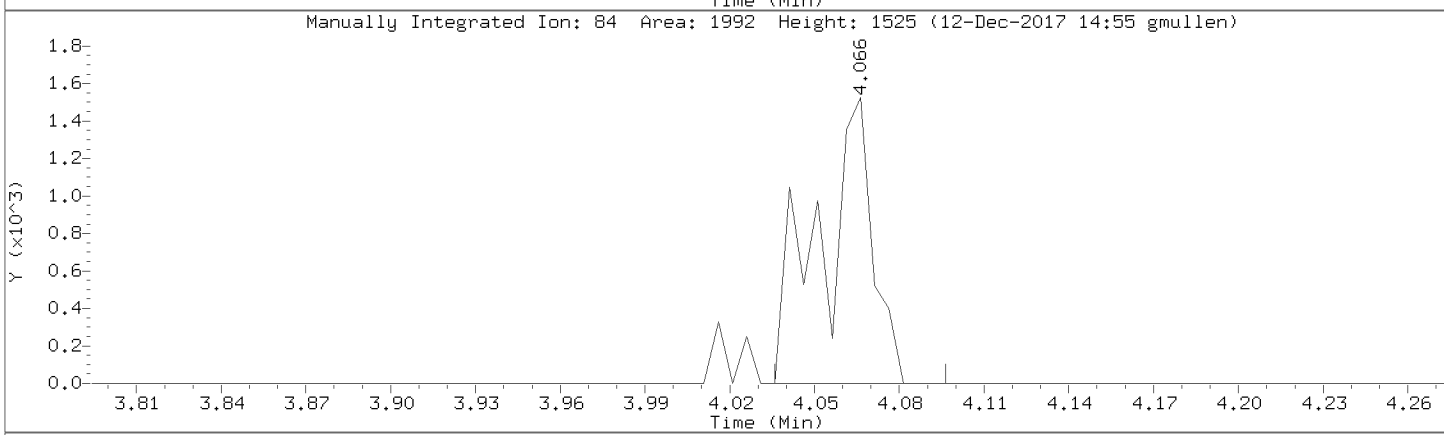


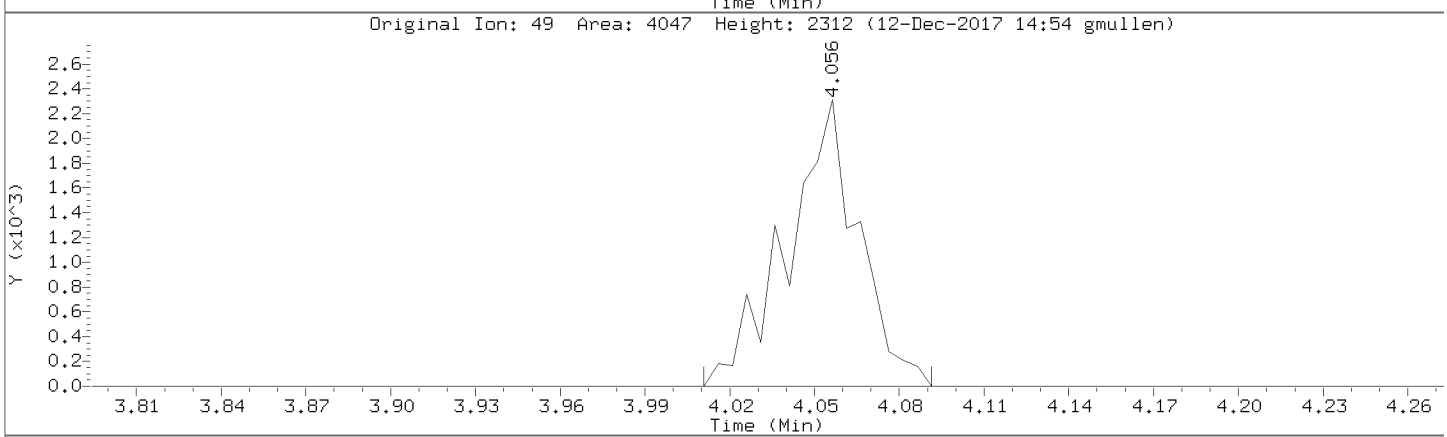


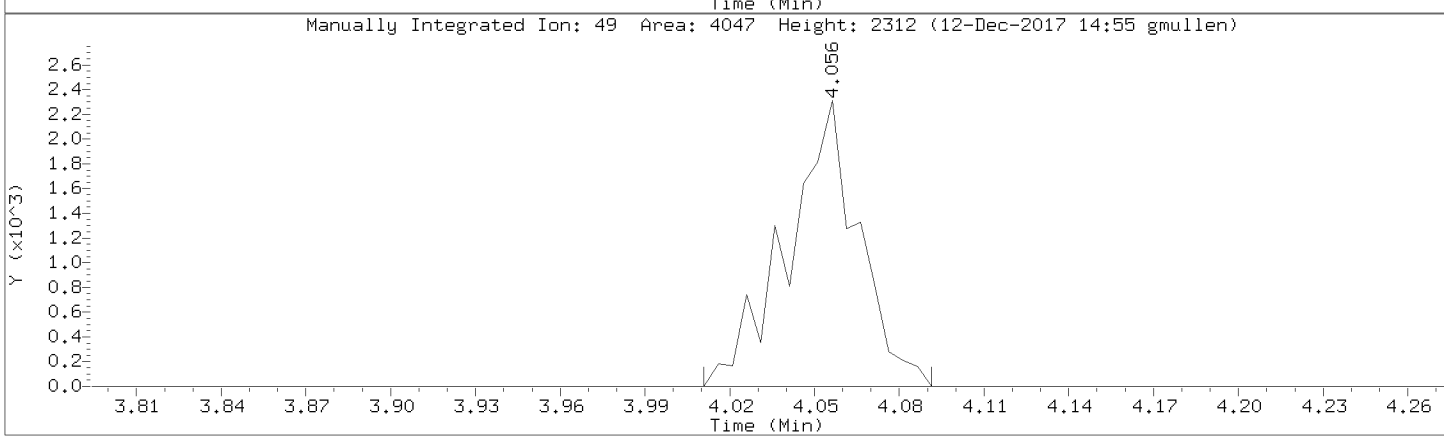
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d21.d
Injection Date: 12-DEC-2017 14:41
Instrument: 20msvd.i
Lab Sample ID: 2066645007

Compound: Methylene Chloride Review Code: LT
CAS Number: 75-09-2

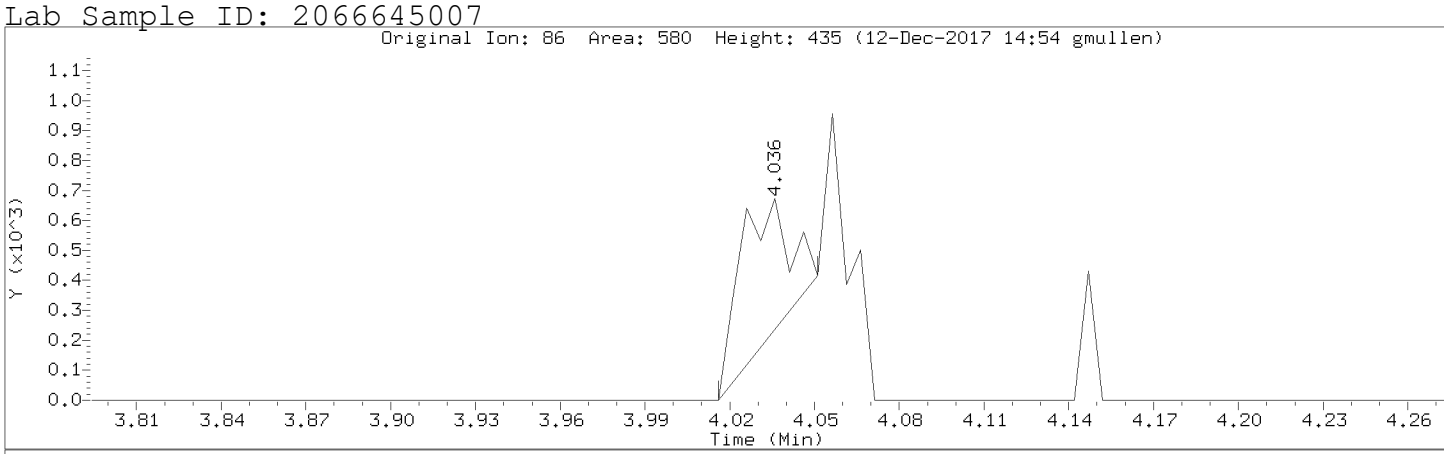


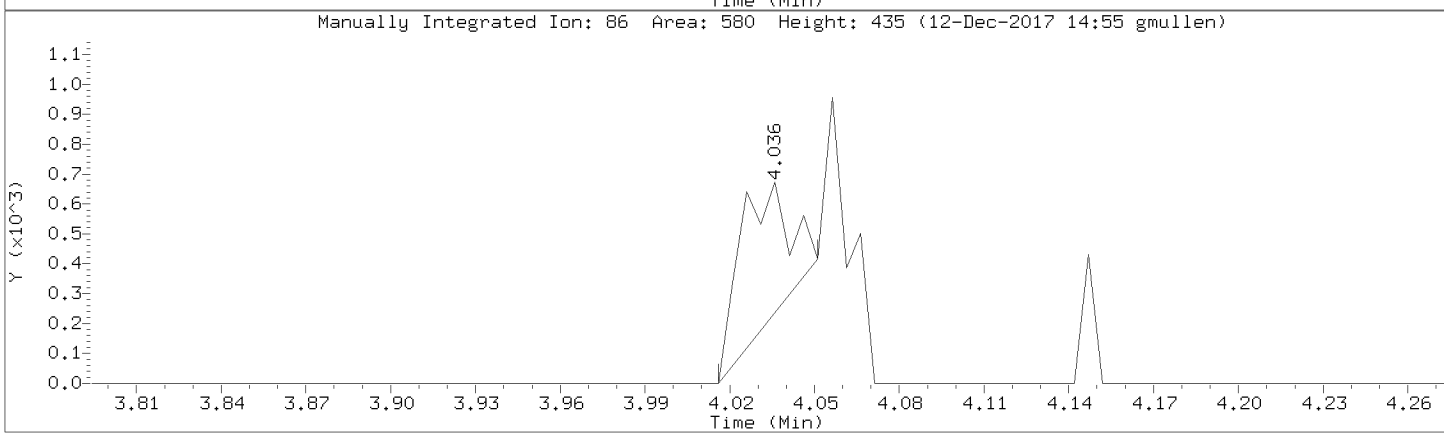






Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d21.d
Injection Date: 12-DEC-2017 14:41
Instrument: 20msvd.i
Lab Sample ID: 2066645007





Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d21.d

Date : 12-DEC-2017 14:41

Client ID: FB-20171205

Instrument: 20msvd.i

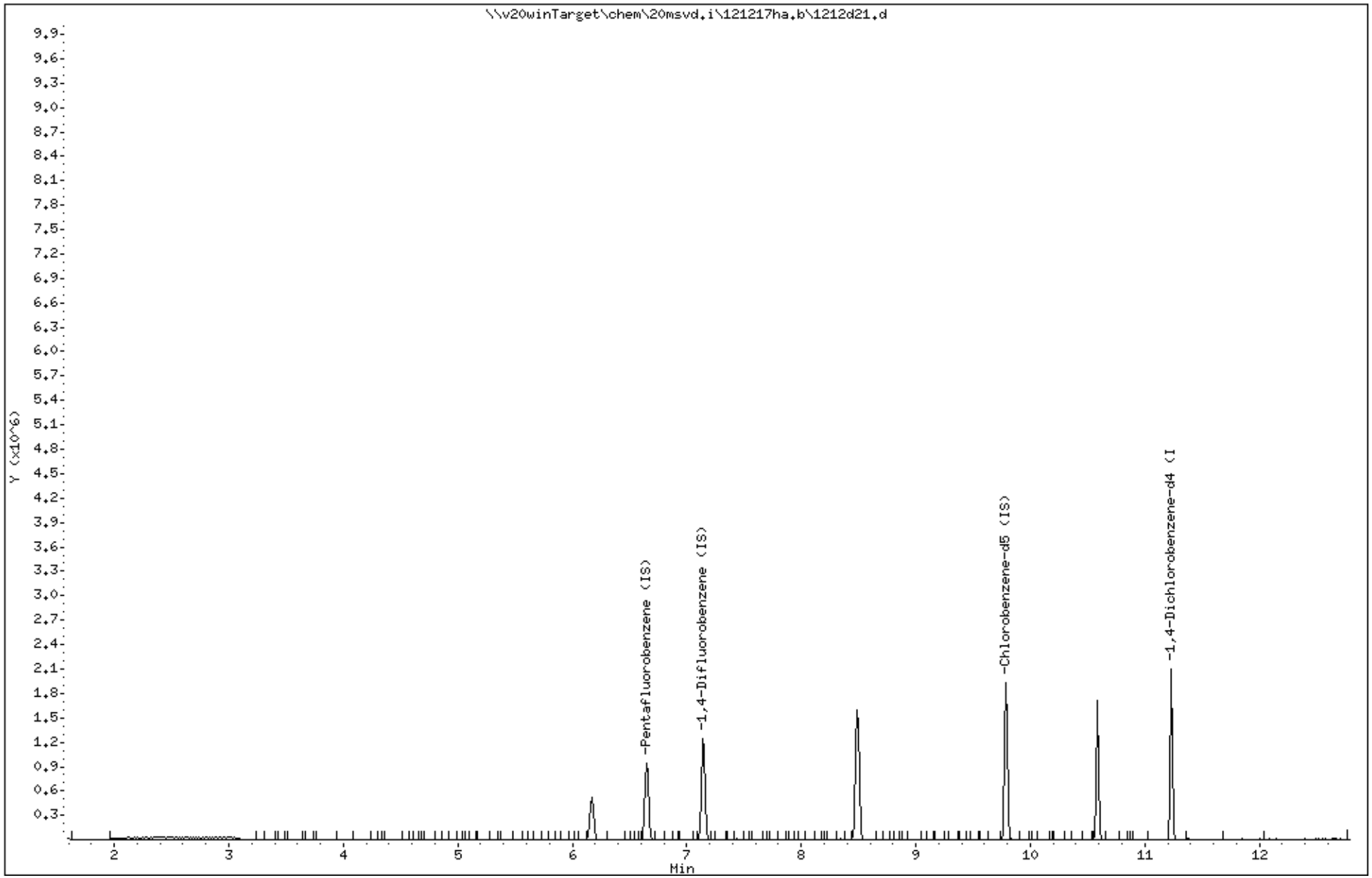
Sample Info: 2066645007

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d21.d
Injection Date: 12-DEC-2017 14:41
Instrument: 20msvd.i
Lab Sample ID: 2066645007
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-4B-2

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:58
Lab Sample ID: 2066645008
Date Analyzed: 12/12/2017 14:58
Lab File ID: 121217HA.B\1212D22.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	5.8	
	Haloether 229	7.6	
	Haloether 406	1.3	
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	28.1	
	Haloether 528	ND	U
	Halomar	6.0	
	Isoflurane	155	
76-38-0	Methoxyflurane	1.7	
	Total Haloether	205	

SAMPLE NO.

MW-4B-2

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:58
Lab Sample ID: 2066645008
Date Analyzed: 12/12/2017 14:58
Lab File ID: 121217.B\1212D22.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	1.2	
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	2.0	
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-4B-2

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 14:58
Lab Sample ID: 2066645008
Date Analyzed: 12/12/2017 14:58
Lab File ID: 121217.B\1212D22.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	1.6	
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d22.d
Lab Smp Id: 2066645008 Client Smp ID: MW-4B-2
Inj Date : 12-DEC-2017 14:58
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645008
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						(D
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	3.325	3.330	(0.500)	8583	1.57578	1.58(M)	
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.161	4.146	(0.626)	3614	2.52252	2.52(M)	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						(D
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	5.980	5.985	(0.899)	10633	1.17121	1.17	
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.166	6.171	(0.927)	307580	50.0655	50.1	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	279060	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						(D
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						(D
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.143	7.144	(1.000)	911366	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.488	8.489	(1.188)	1024780	50.2552	50.2	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	8.897	8.897	(0.909)	10104	1.98251	1.98	
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	384295	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	378795	50.2579	50.2	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D
	76 2-Chlorotoluene	91	Compound Not Detected.						

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	381133	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d
Lab Smp Id: 2066645008 Client Smp ID: MW-4B-2
Inj Date : 12-DEC-2017 14:58
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645008
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

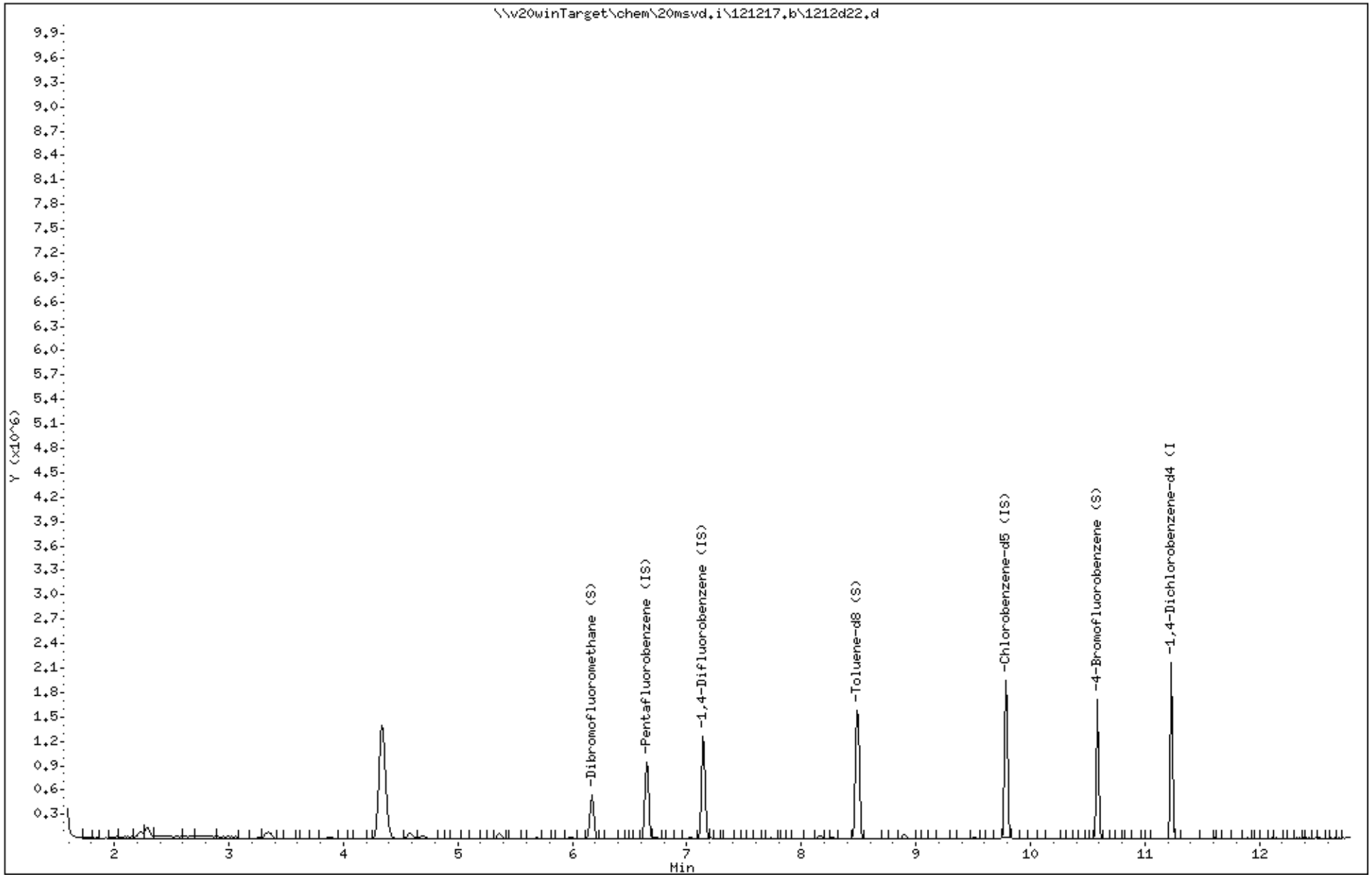
Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	2.237	2.237	(0.336)	33647	7.60073	7.60
2 Haloether 406	85	3.879	3.884	(0.583)	9759	1.28929	1.29
3 Isoflurane	117	4.332	4.333	(0.652)	386631	154.755	155
4 Haloether 508	97	4.353	4.358	(0.655)	64715	28.0852	28.1
5 Enflurane	117	4.589	4.584	(0.690)	29851	5.83634	5.84
6 Halomar	81	5.360	5.365	(0.806)	66896	5.97174	5.97
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	279060	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.143	7.144	(1.000)	911366	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	8.161	8.161	(1.142)	27581	1.69256	1.69
13 Haloether 528	211	9.511	9.511	(1.331)	7571	0.54725	0.547
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	384295	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	381133	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d22.d
Date : 12-DEC-2017 14:58
Client ID: MW-4B-2
Sample Info: 2066645008
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

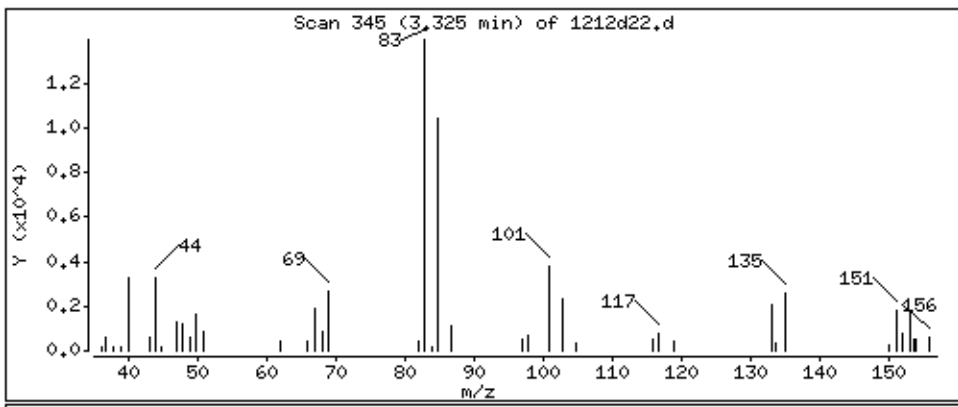
Operator: GEM

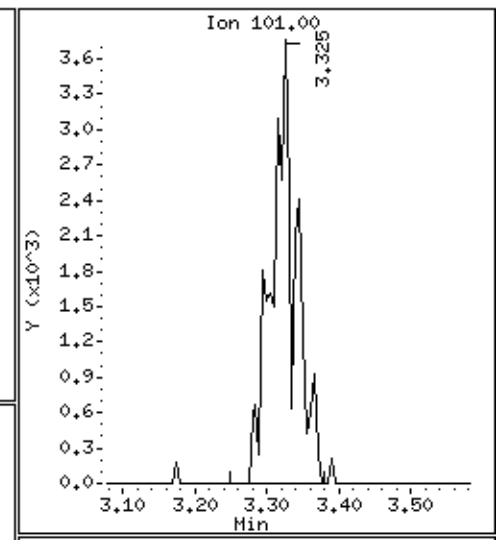
Column phase: RTX VMS 30m

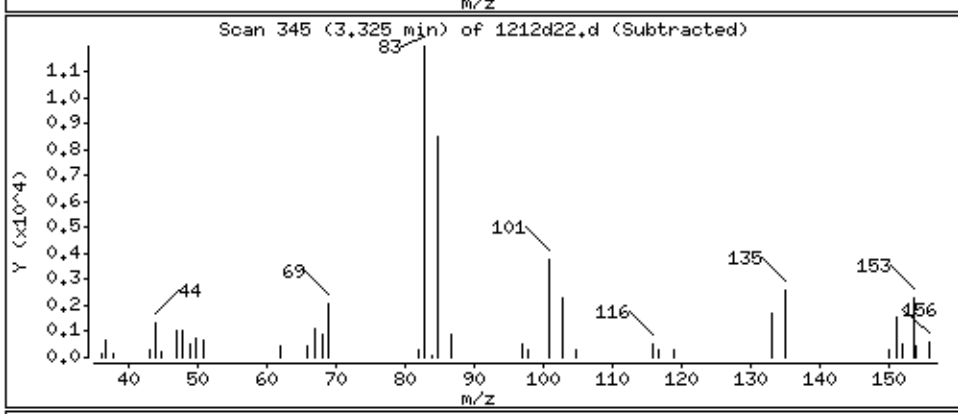
Column diameter: 0.25

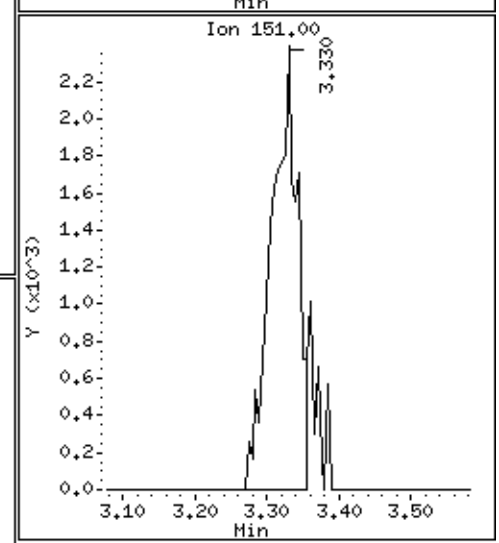
9 1,1,2-Trichlorotrifluoroethane

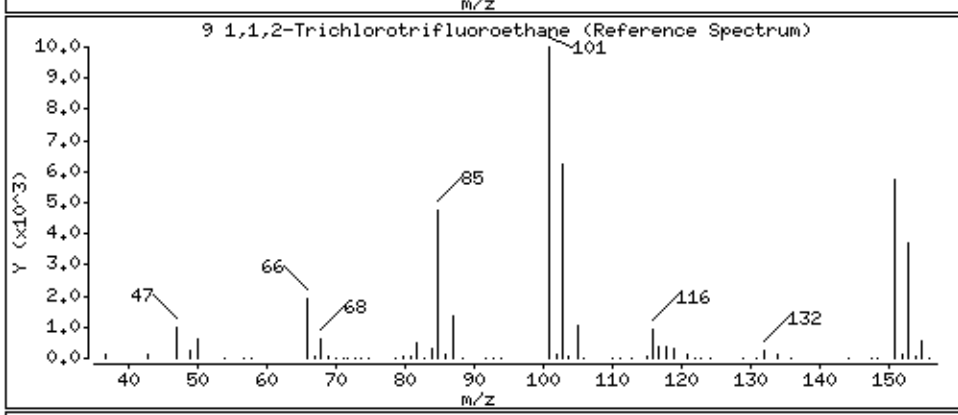
Concentration: 1.58 ug/L

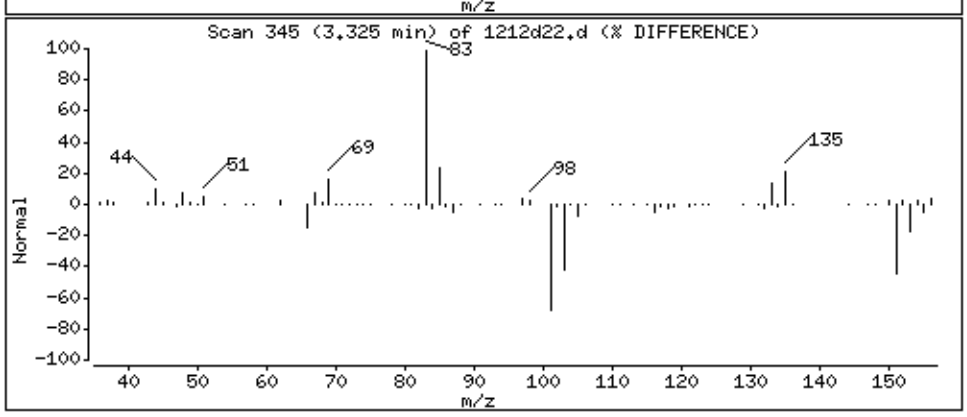












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

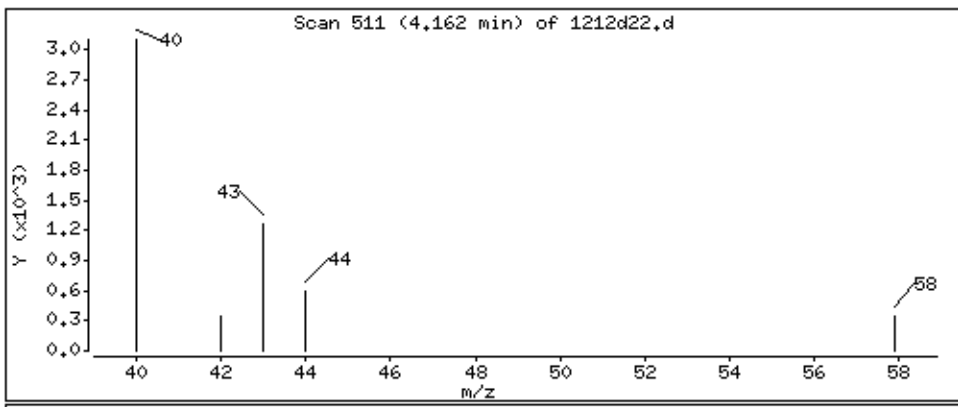
Operator: GEM

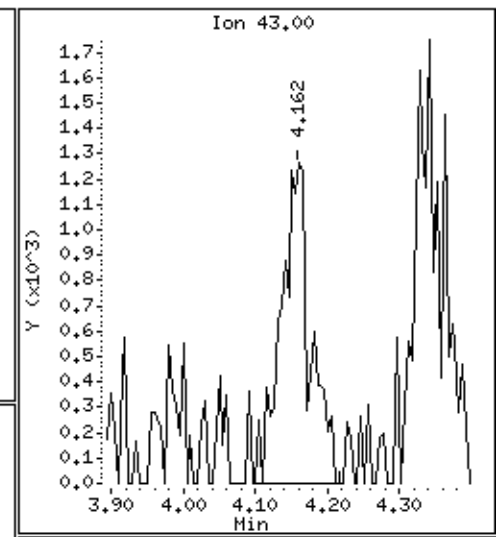
Column phase: RTX VMS 30m

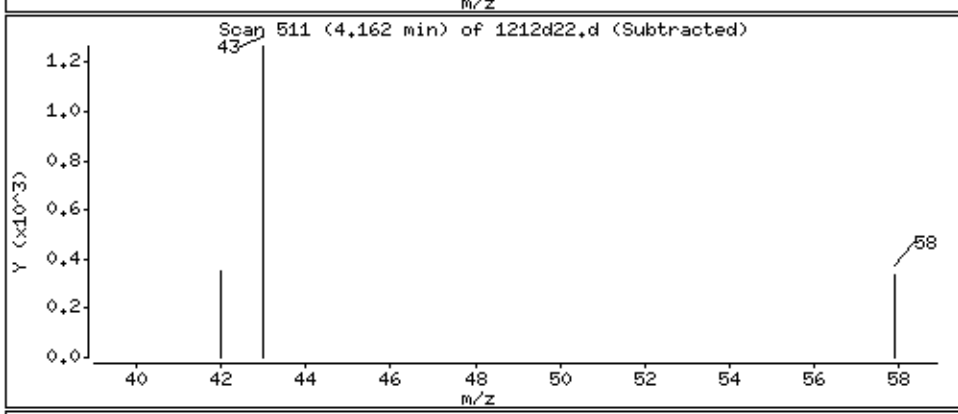
Column diameter: 0.25

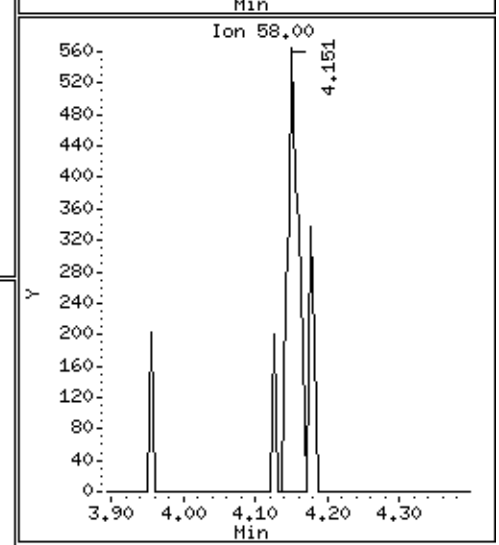
14 Acetone

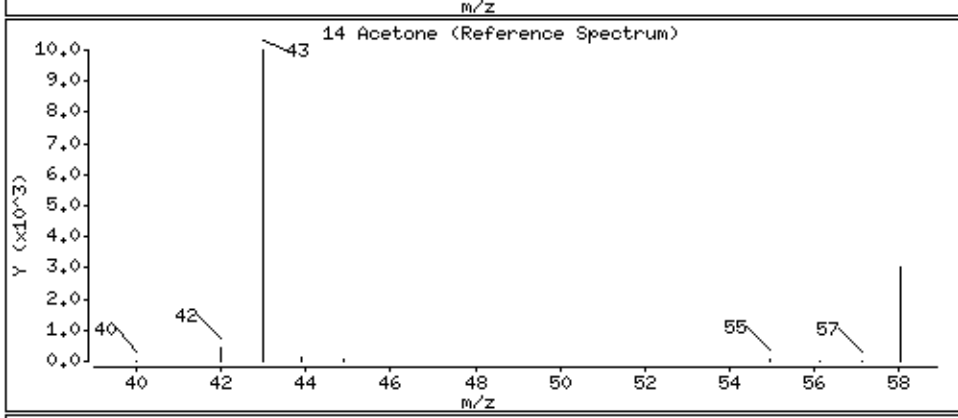
Concentration: 2.52 ug/L

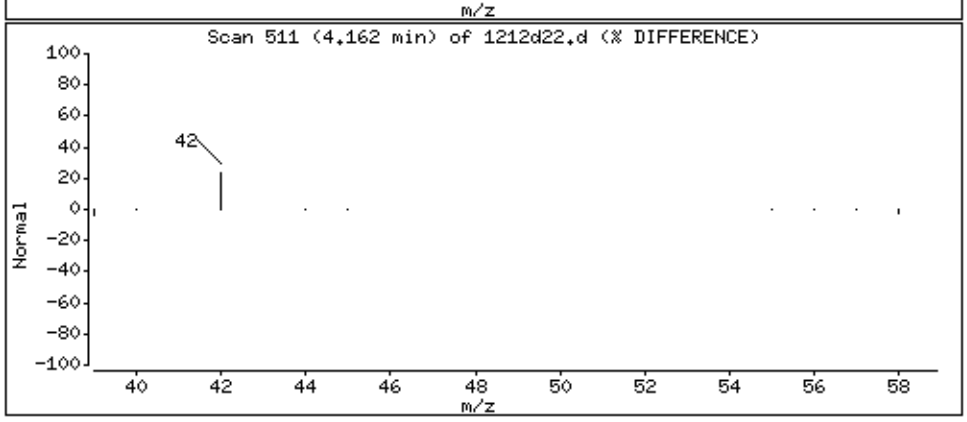












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

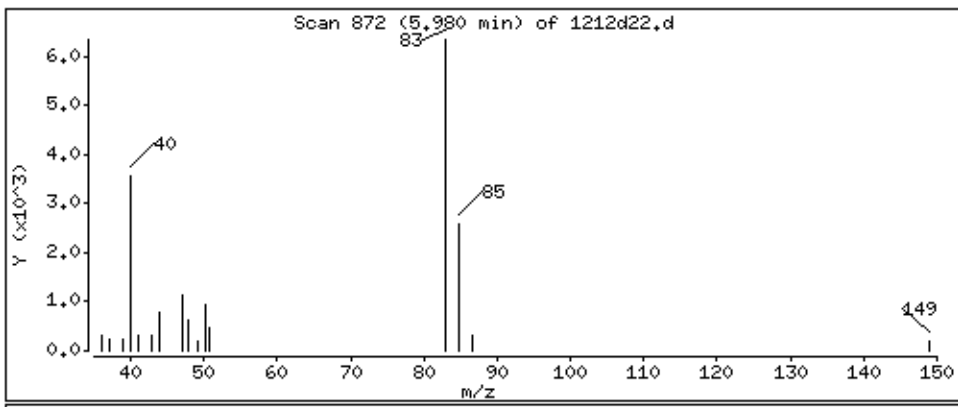
Operator: GEM

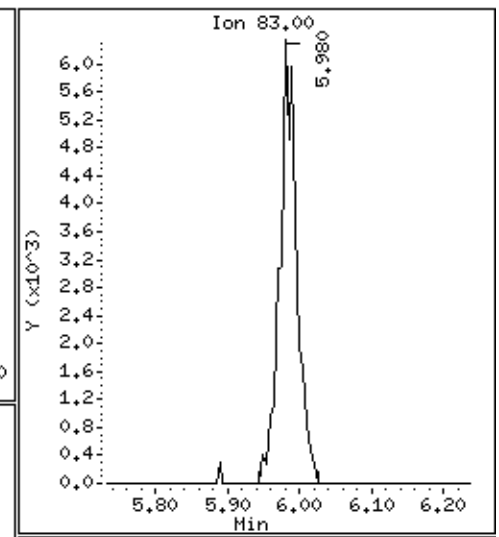
Column phase: RTX VMS 30m

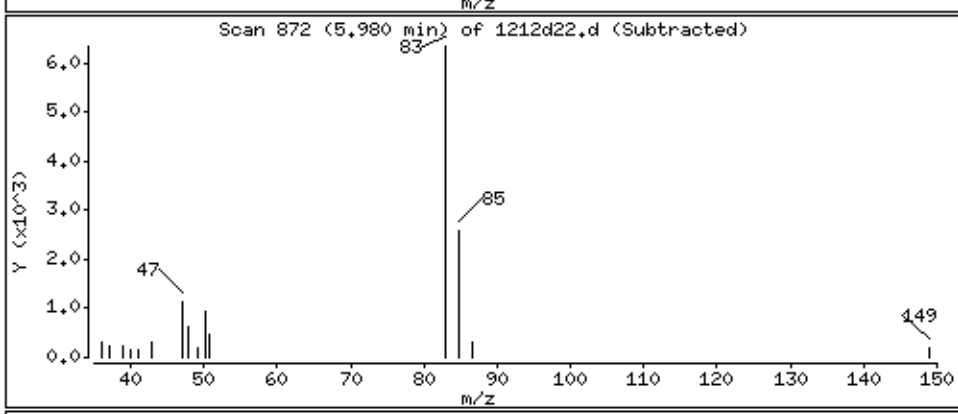
Column diameter: 0.25

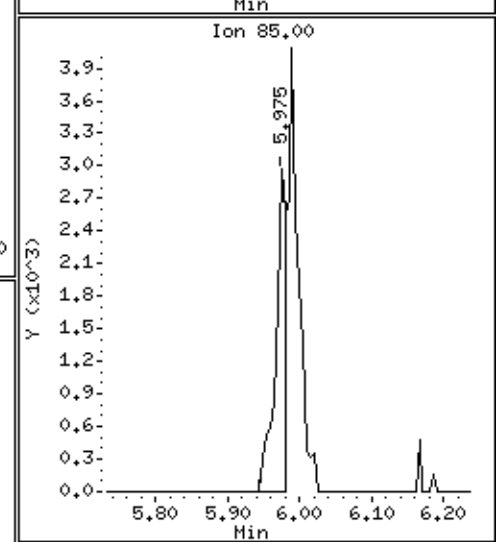
28 Chloroform

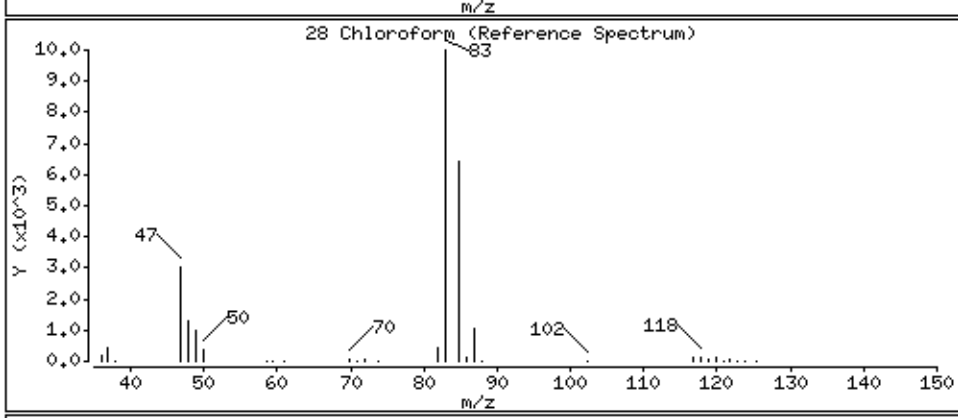
Concentration: 1.17 ug/L

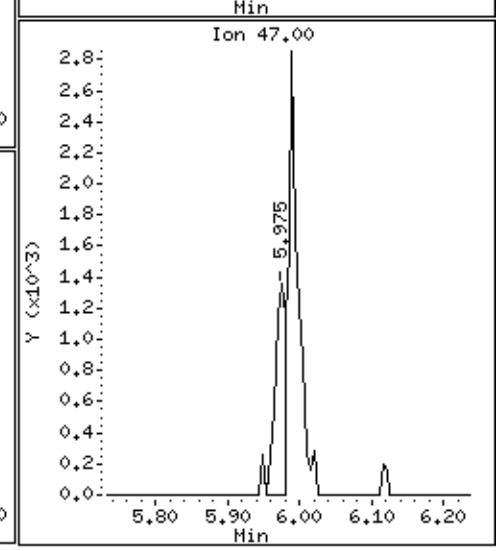


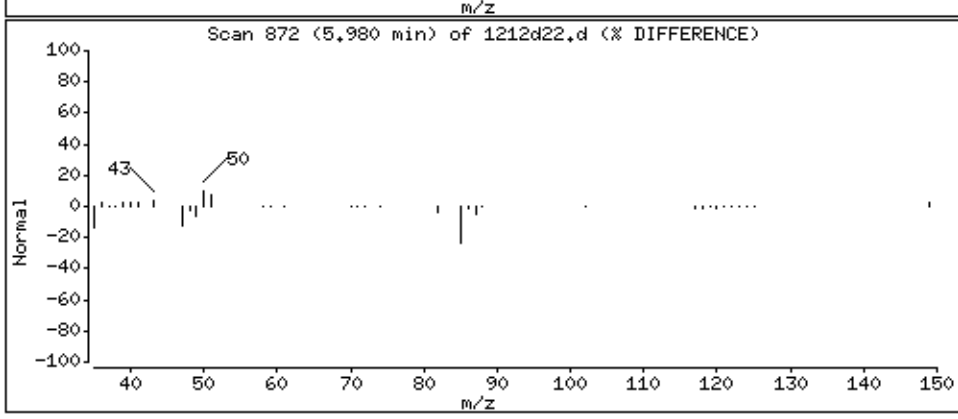












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

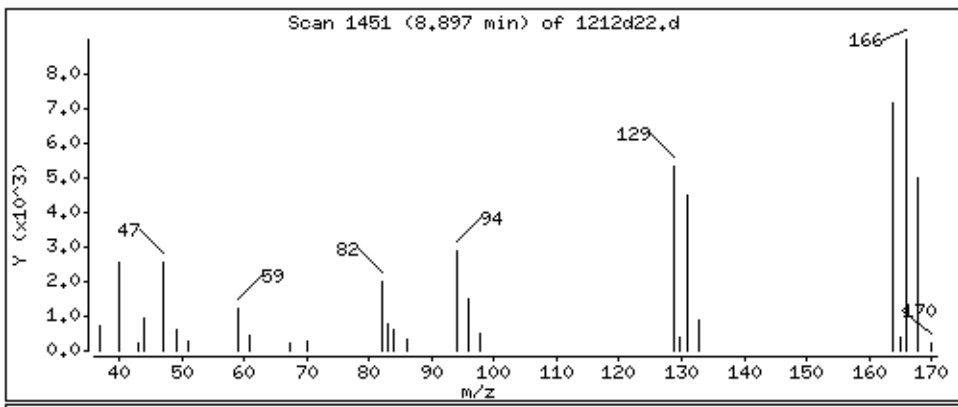
Operator: GEM

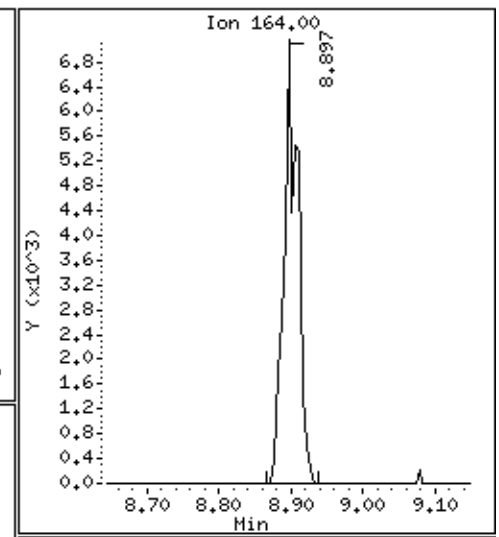
Column phase: RTX VMS 30m

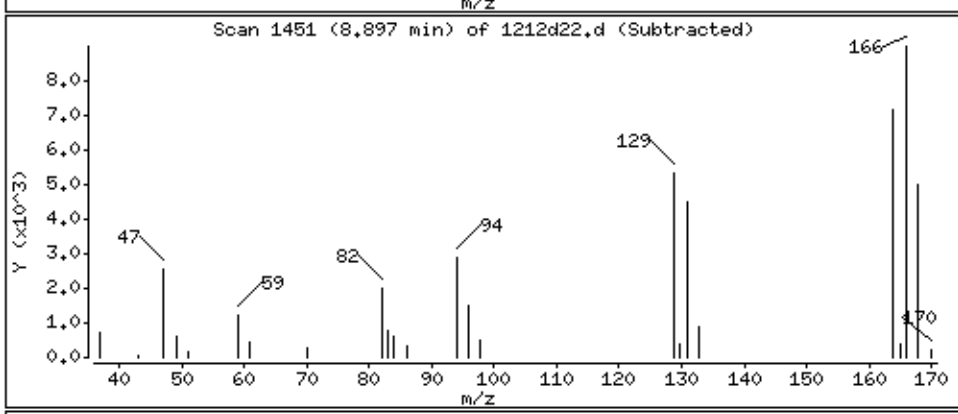
Column diameter: 0.25

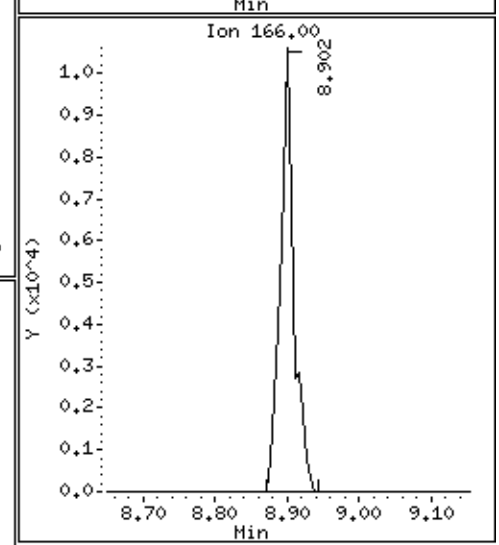
53 Tetrachloroethene

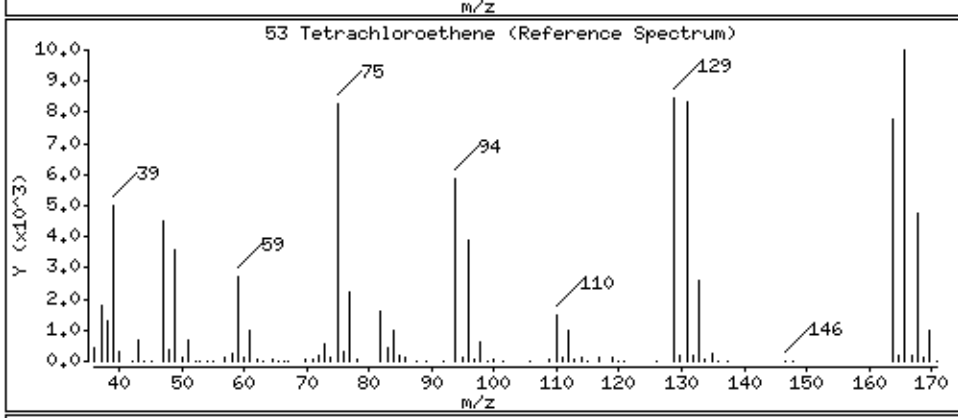
Concentration: 1.98 ug/L

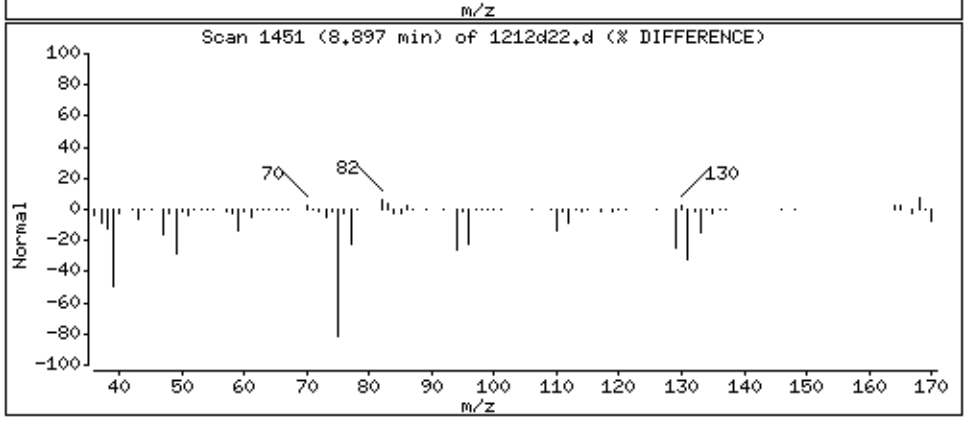












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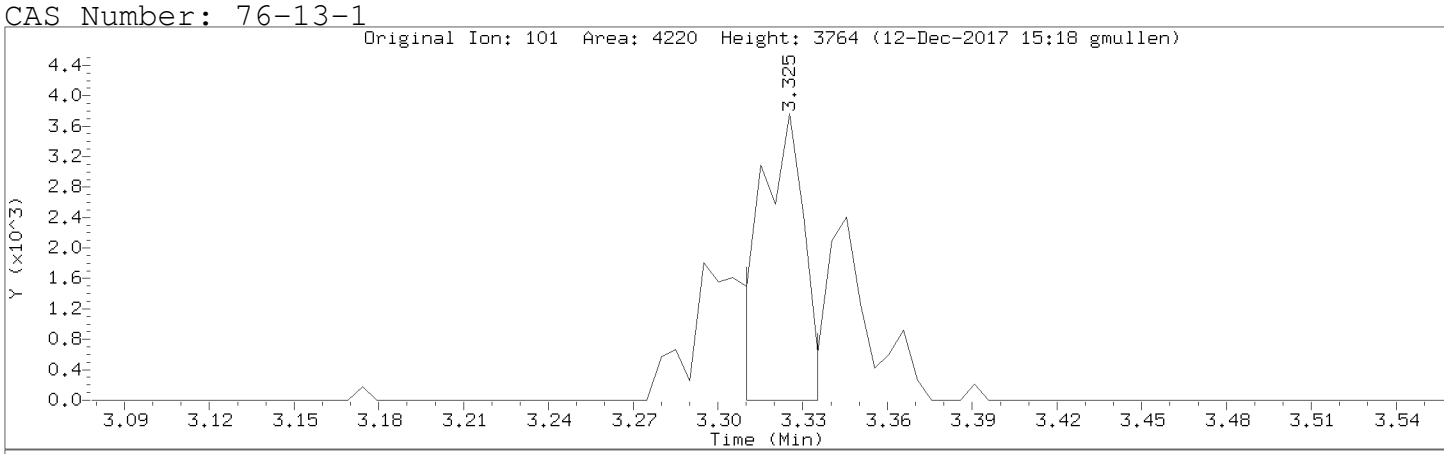
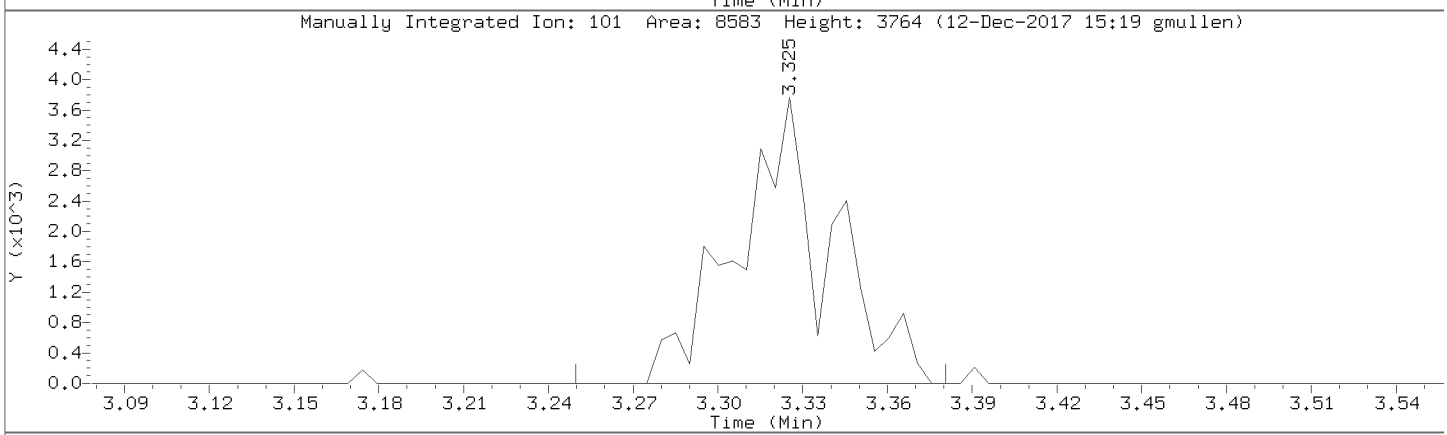
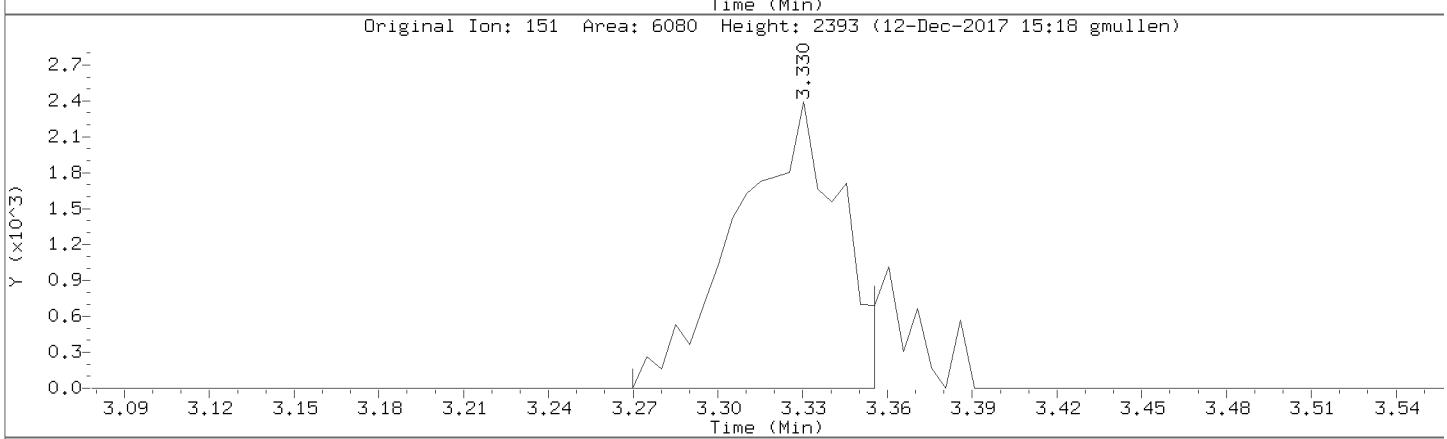
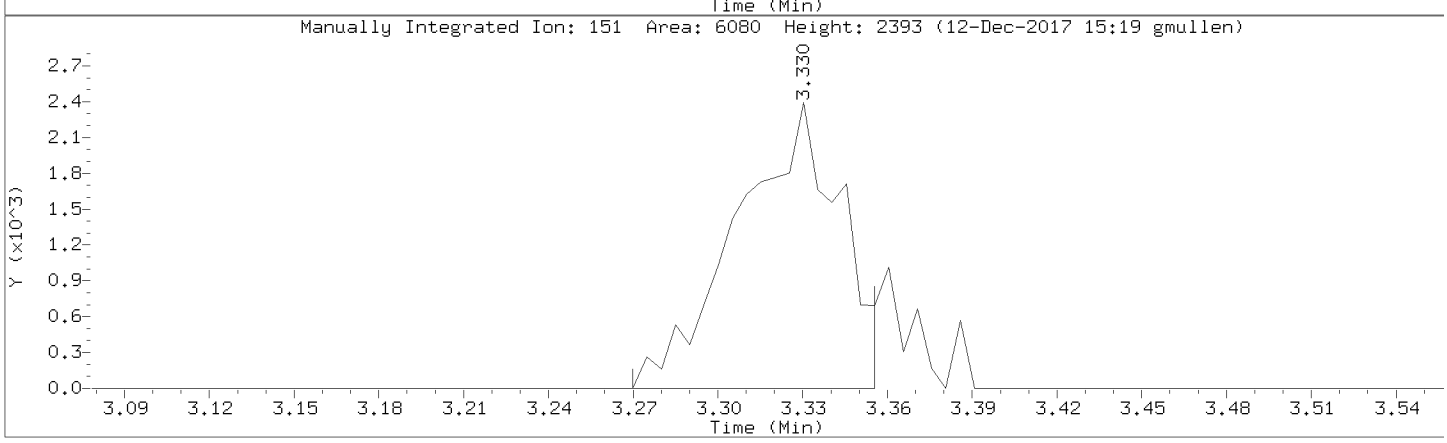
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d22.d
Injection Date: 12-DEC-2017 14:58
Instrument: 20msvd.i
Lab Sample ID: 2066645008

Compound: 1,1,2-Trichlorotrifluoroethane Review Code: LT
CAS Number: 76-13-1



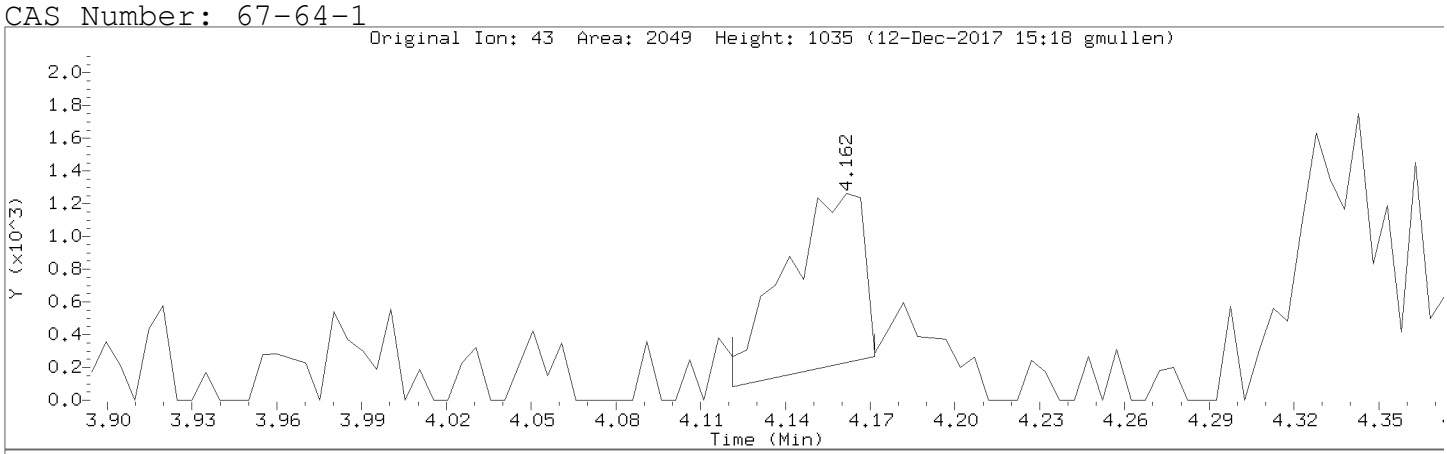


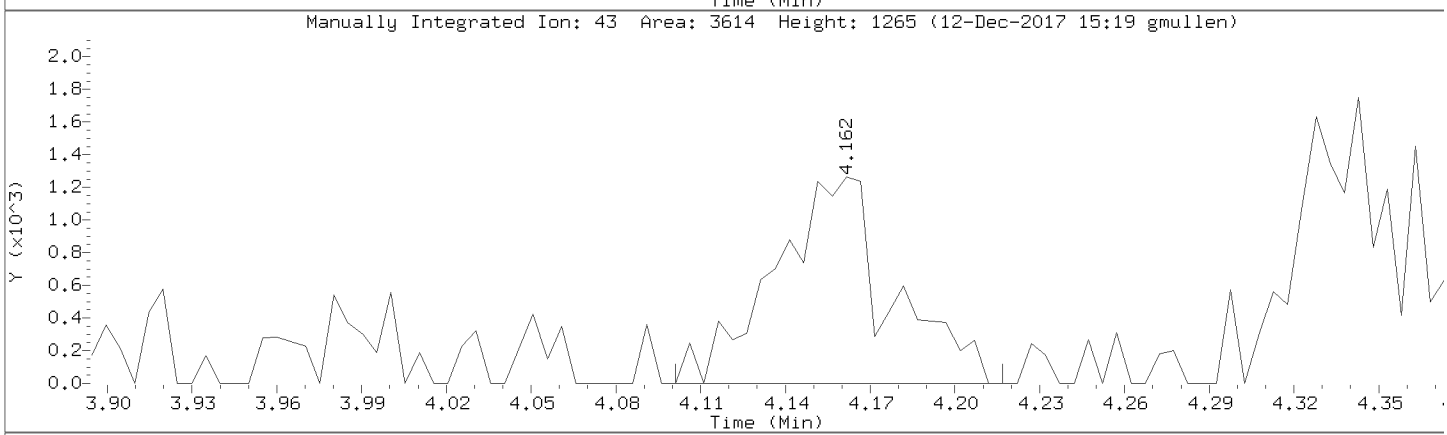


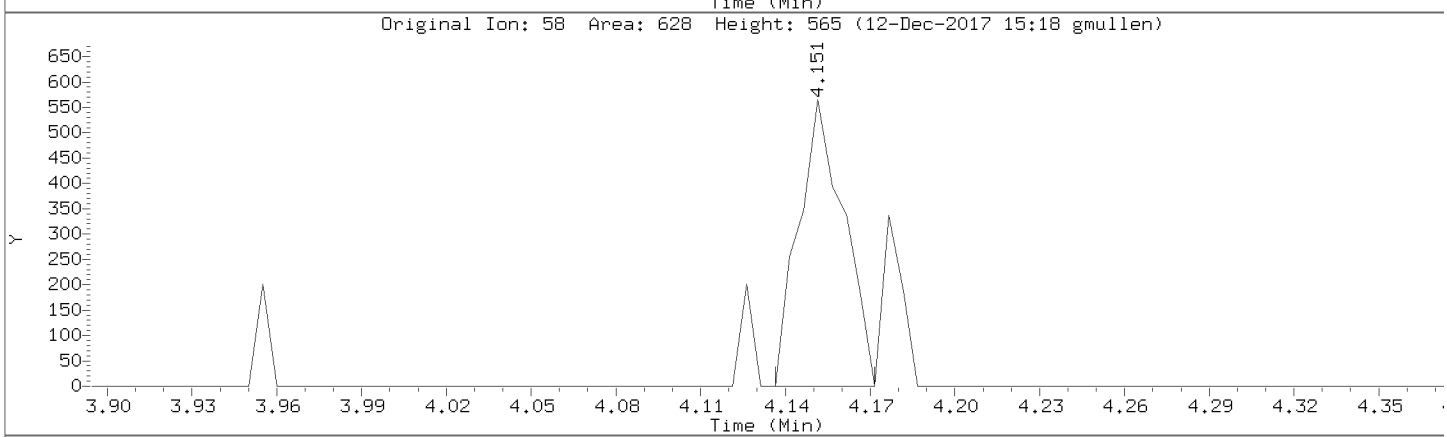


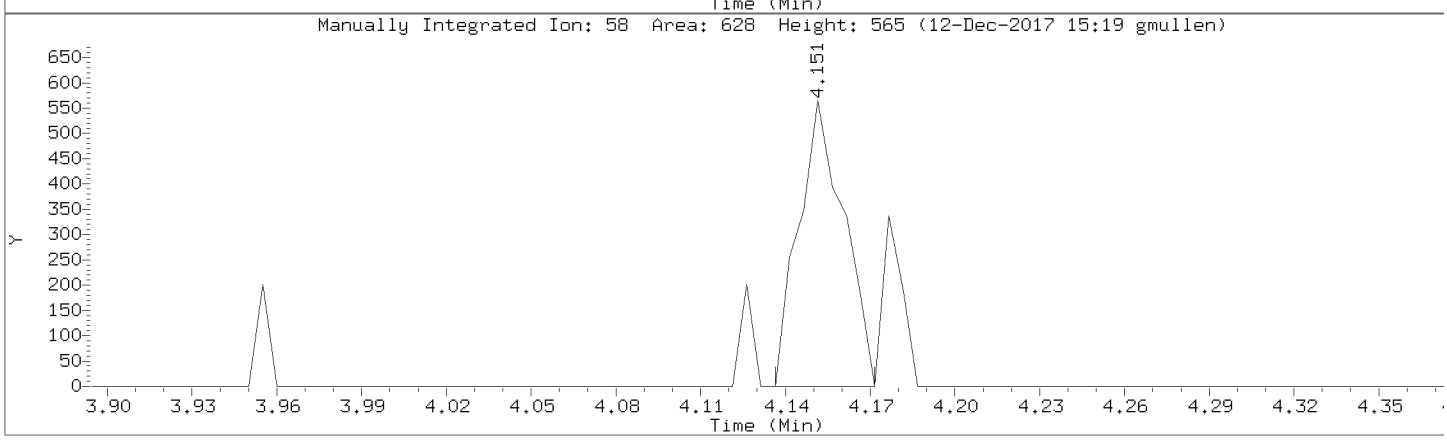
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d22.d
Injection Date: 12-DEC-2017 14:58
Instrument: 20msvd.i
Lab Sample ID: 2066645008

Compound: Acetone Review Code: LT
CAS Number: 67-64-1



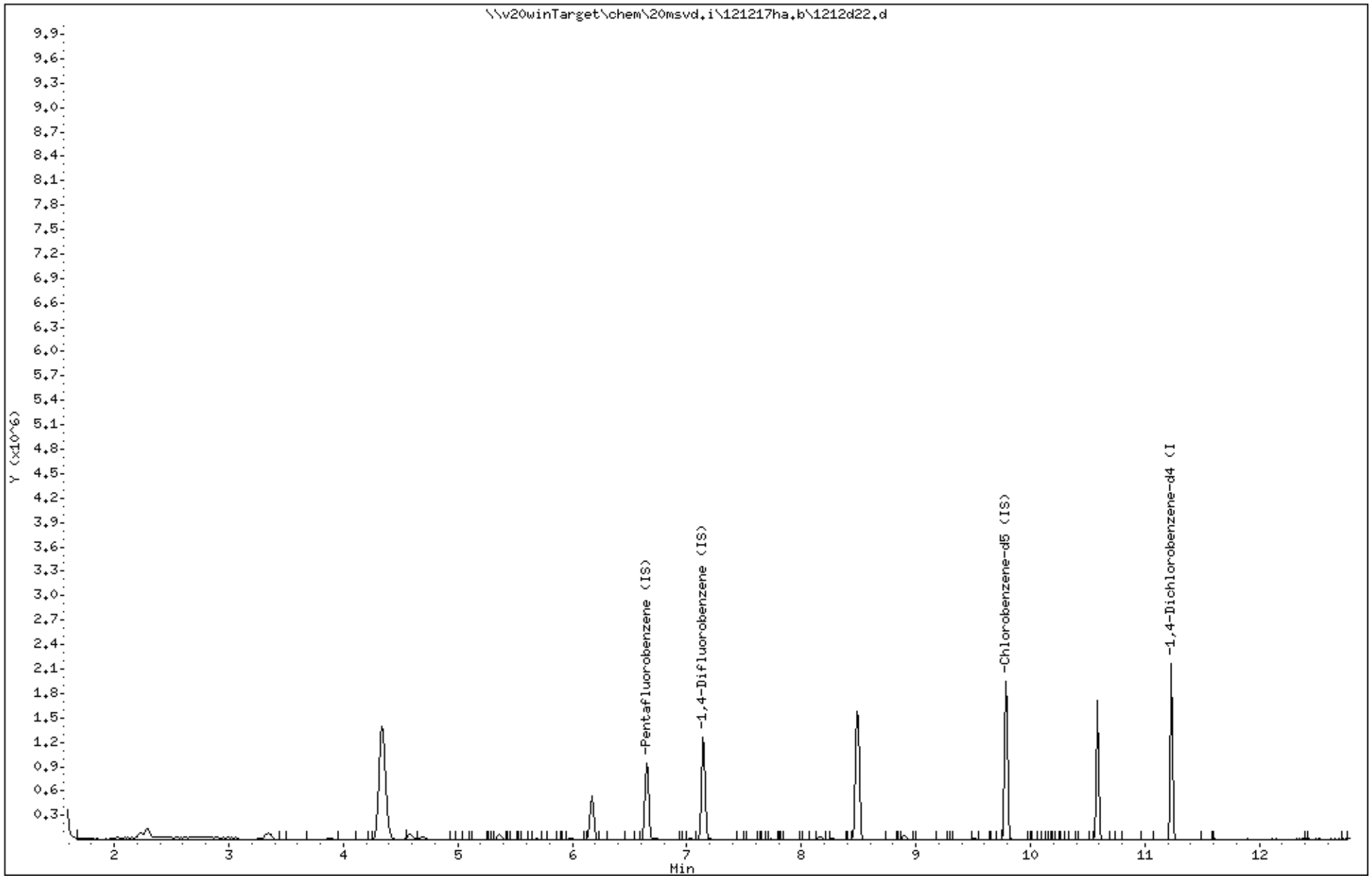






Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d
Date : 12-DEC-2017 14:58
Client ID: MW-4B-2
Sample Info: 2066645008
Purge Volume: 5.0
Column phase: DB-624

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.18



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Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

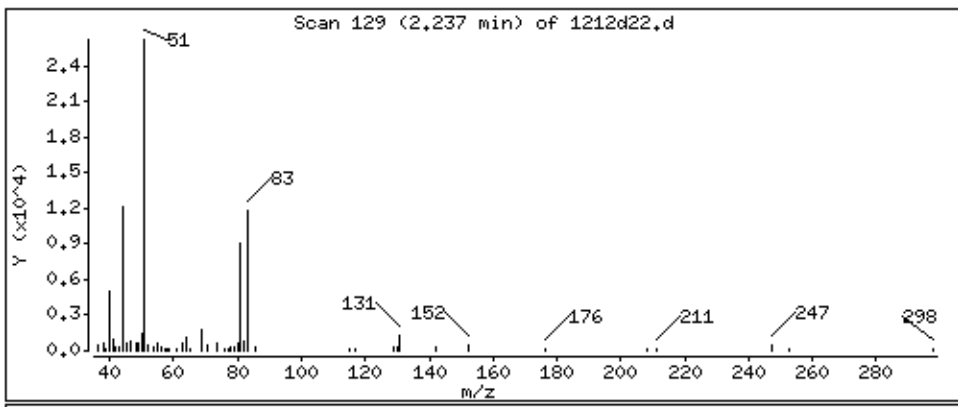
Operator: GEM

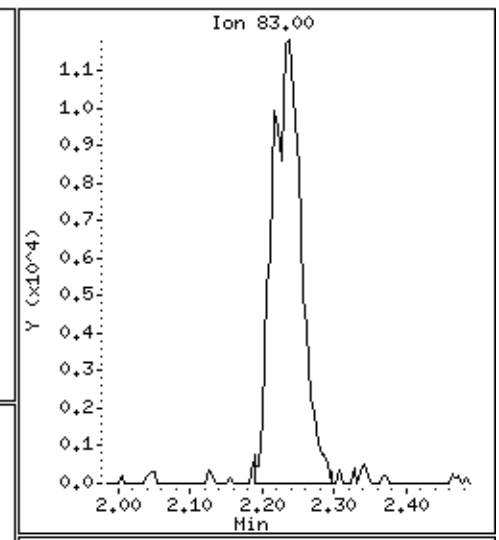
Column phase: DB-624

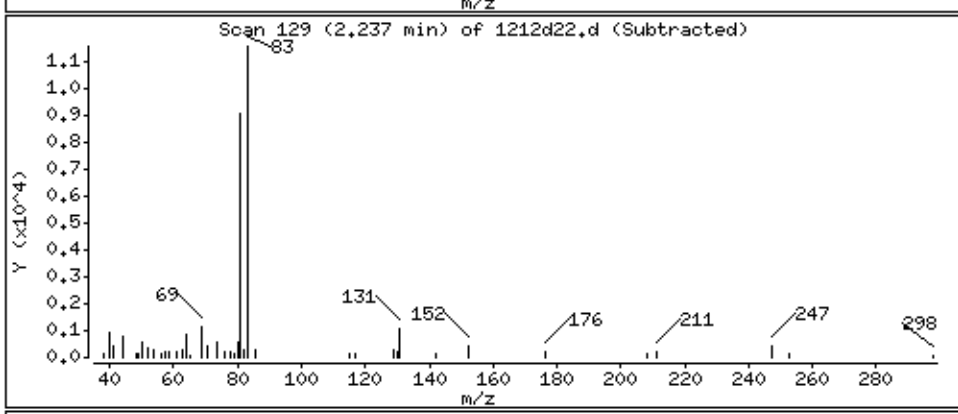
Column diameter: 0.18

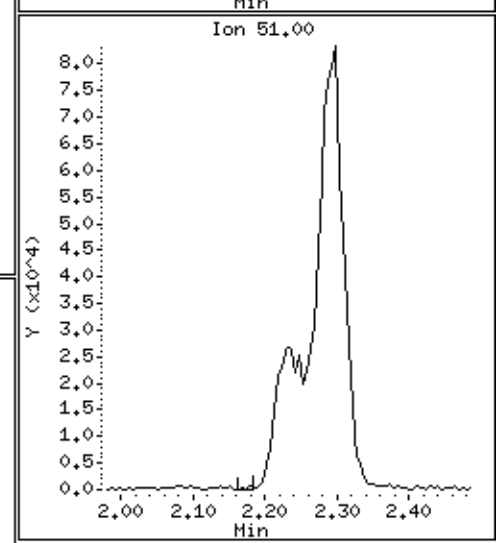
1 Haloether 229

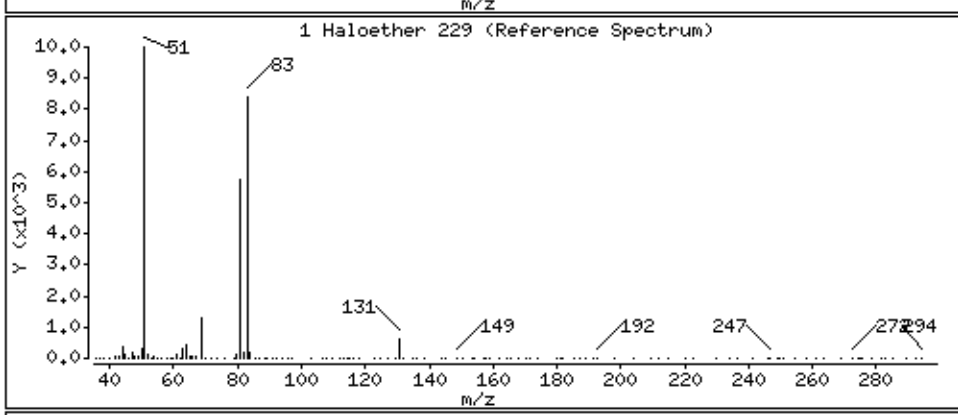
Concentration: 7.60 ug/L

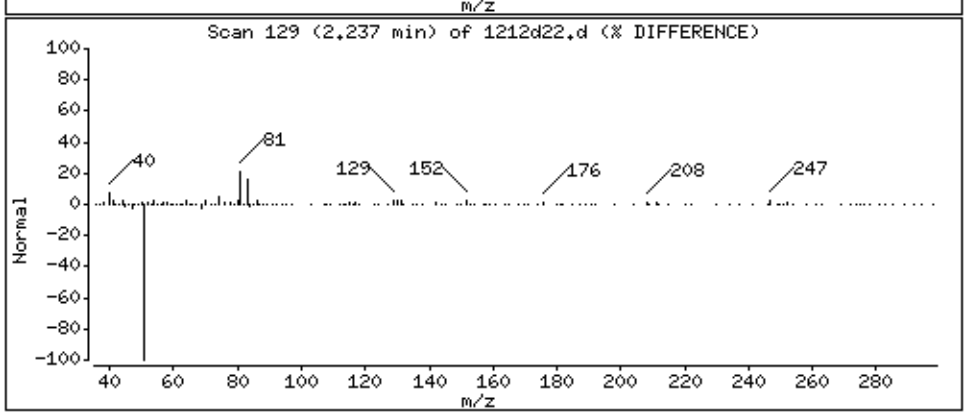












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

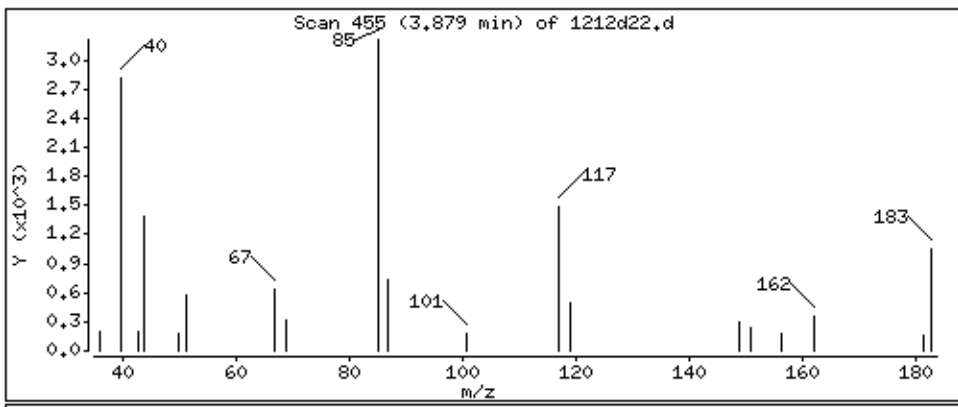
Operator: GEM

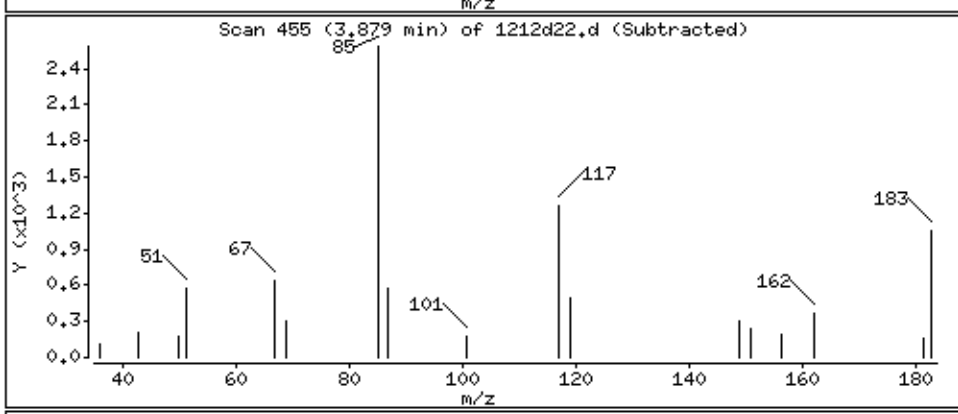
Column phase: DB-624

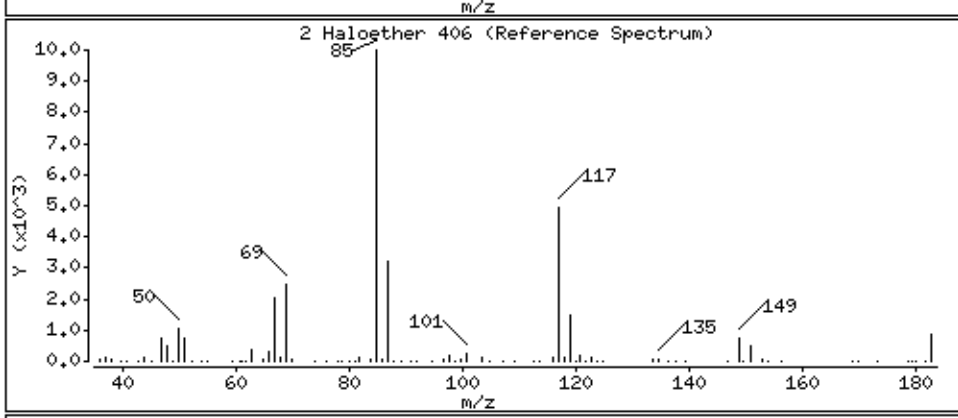
Column diameter: 0.18

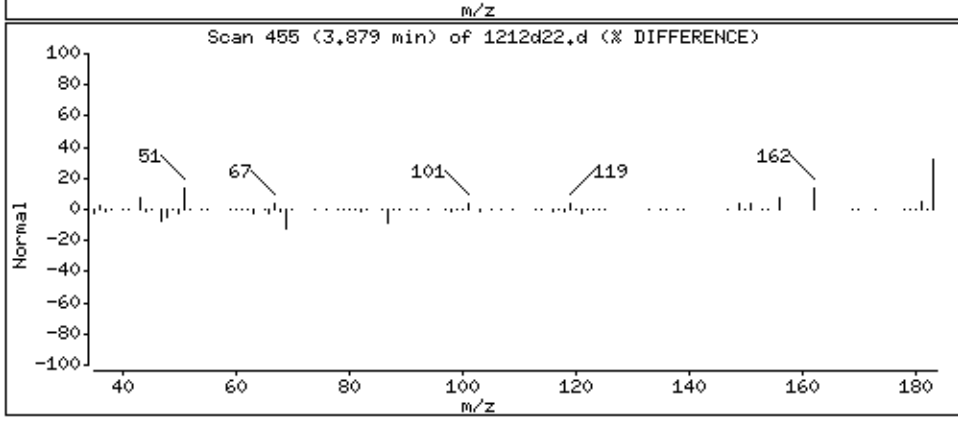
2 Haloether 406

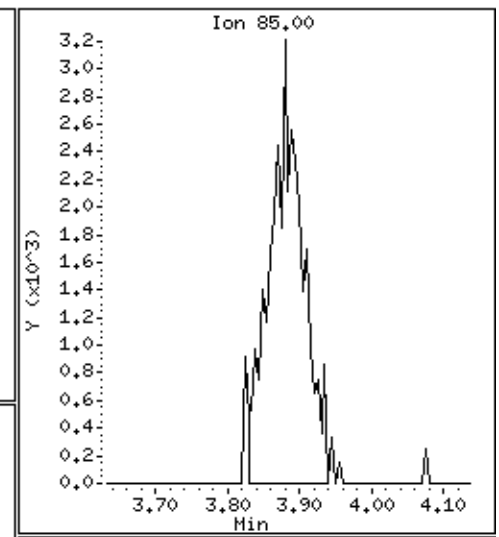
Concentration: 1.29 ug/L

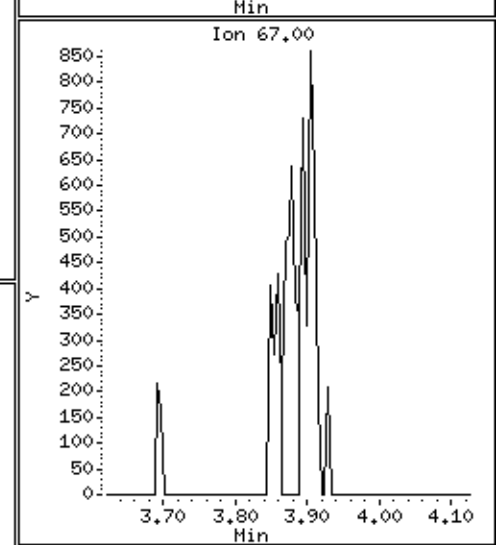


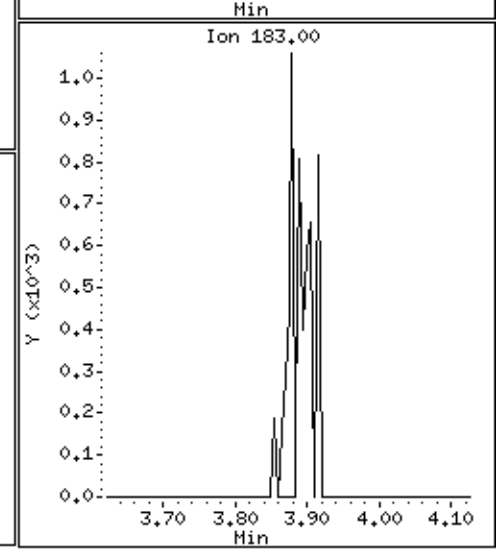












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

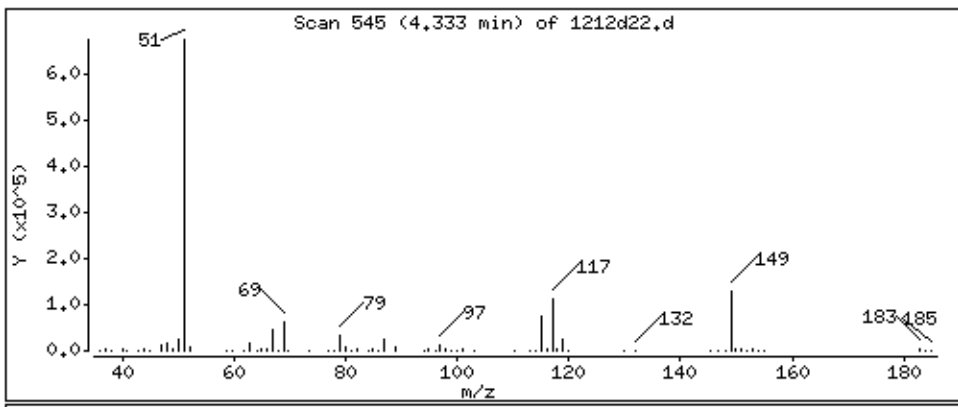
Operator: GEM

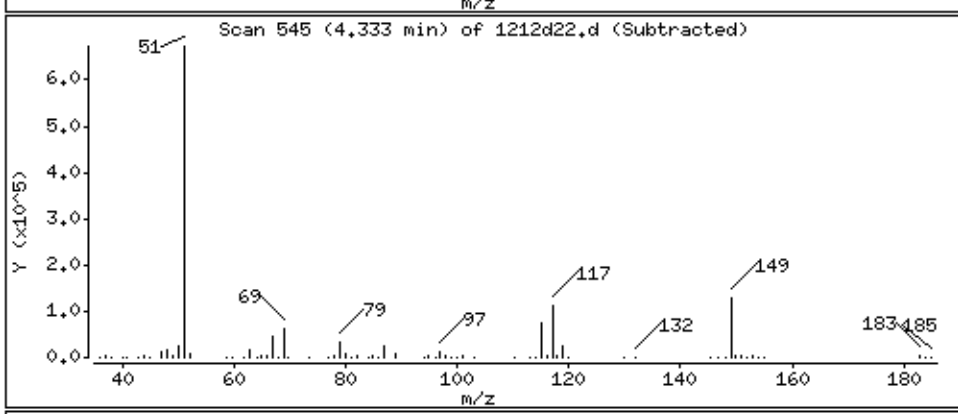
Column phase: DB-624

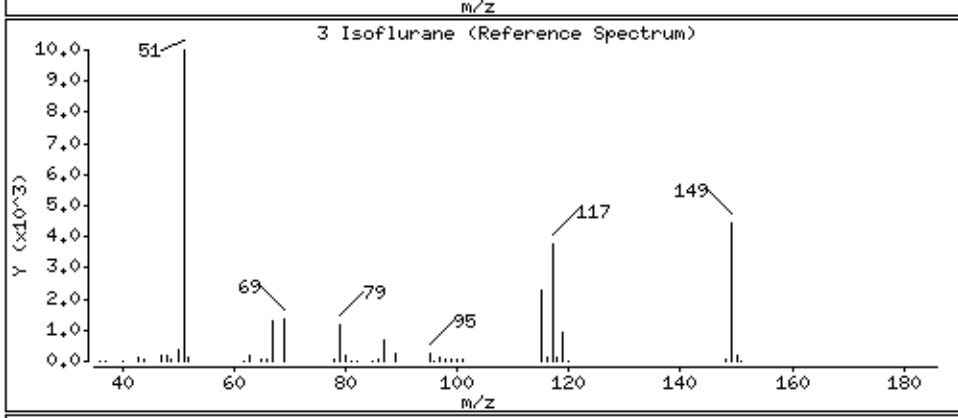
Column diameter: 0.18

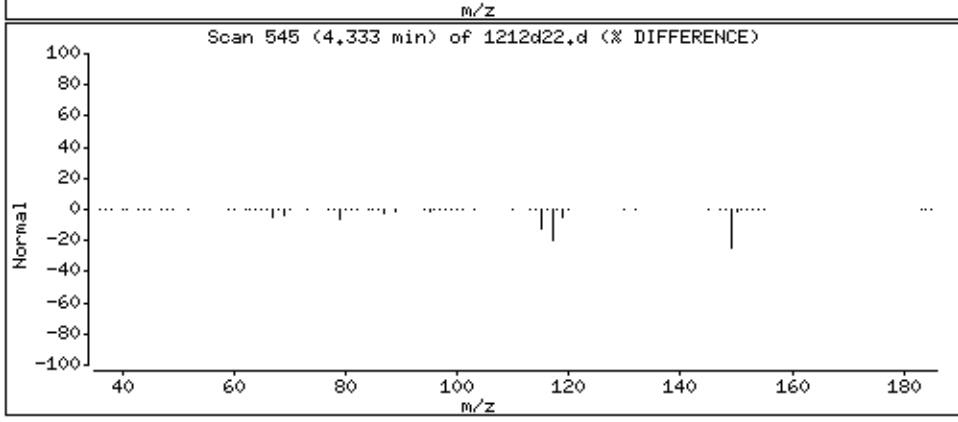
3 Isoflurane

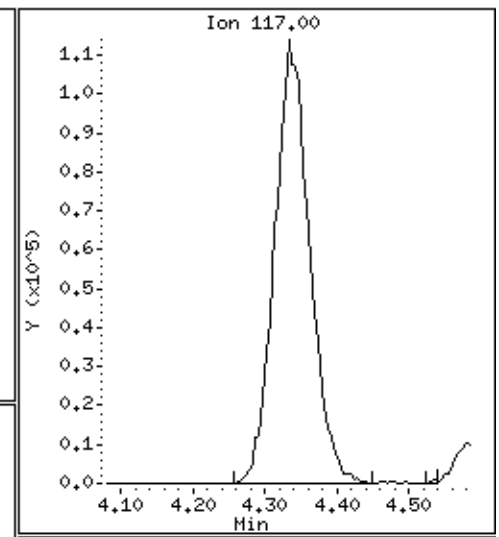
Concentration: 155 ug/L

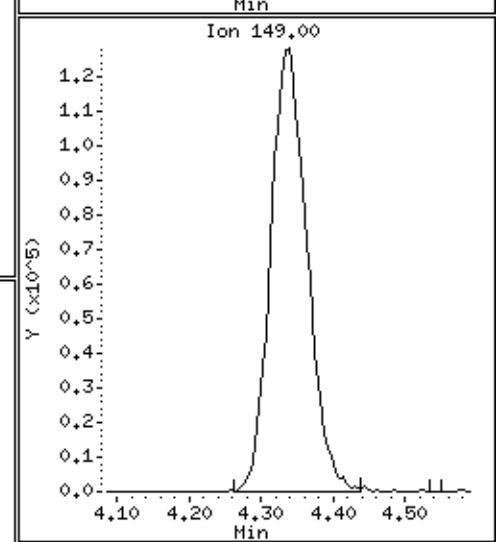


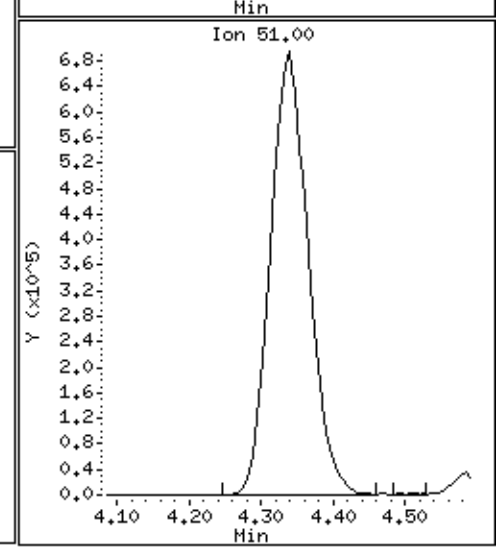












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

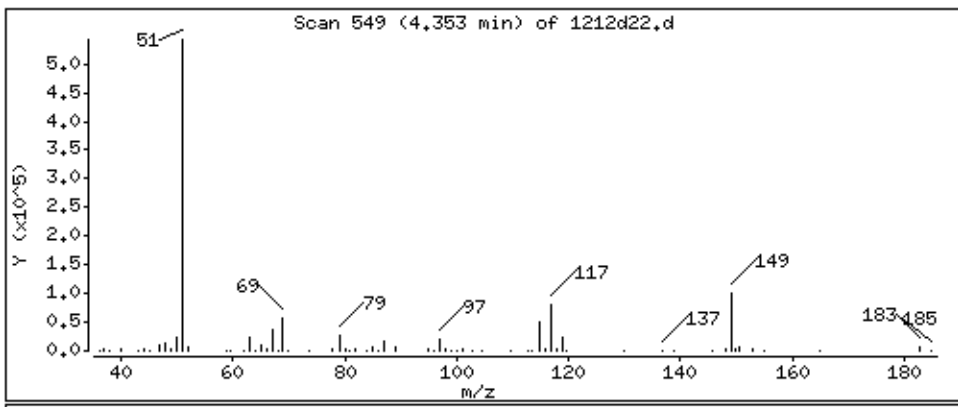
Operator: GEM

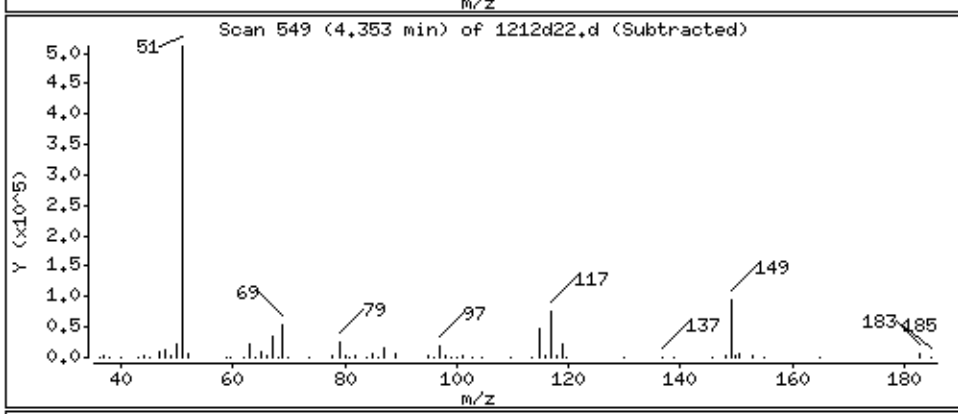
Column phase: DB-624

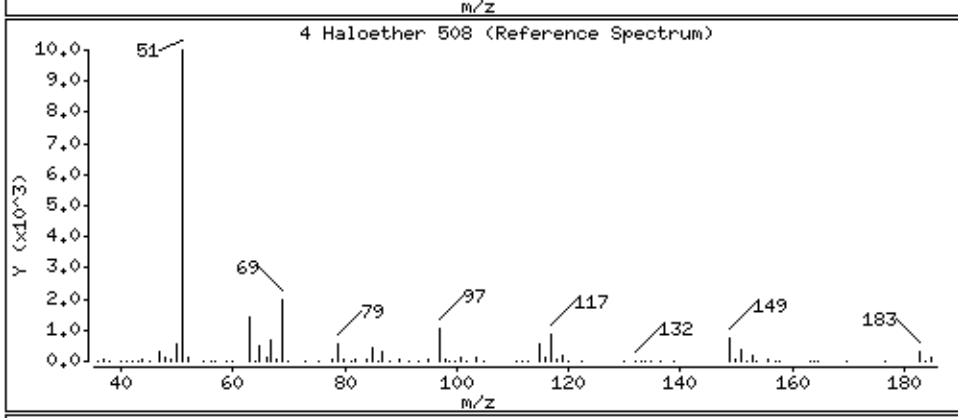
Column diameter: 0.18

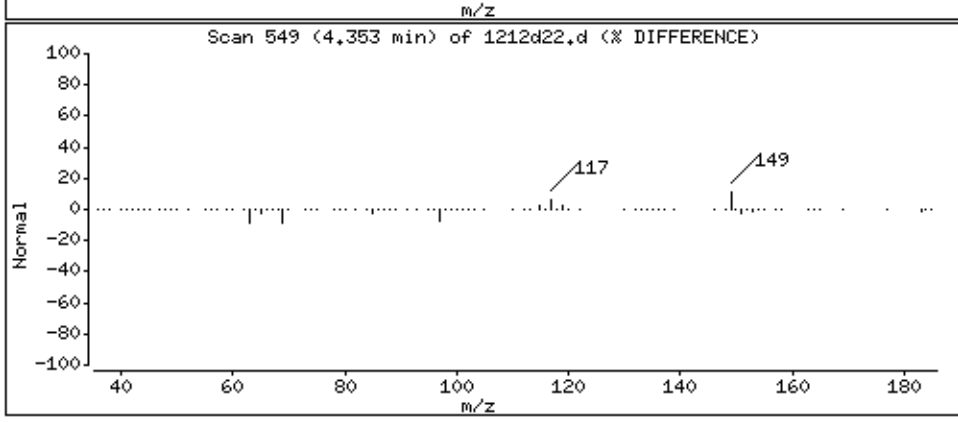
4 Haloether 508

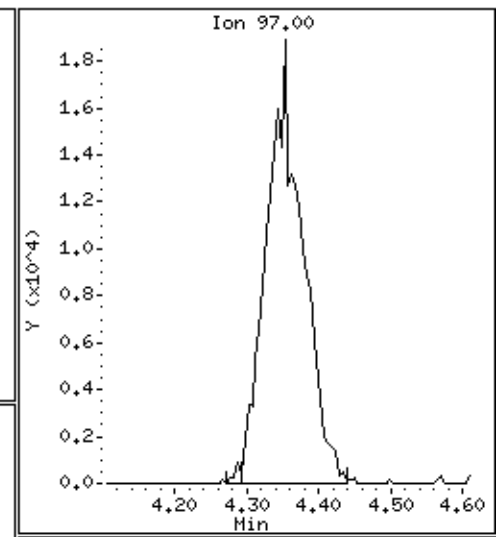
Concentration: 28.1 ug/L

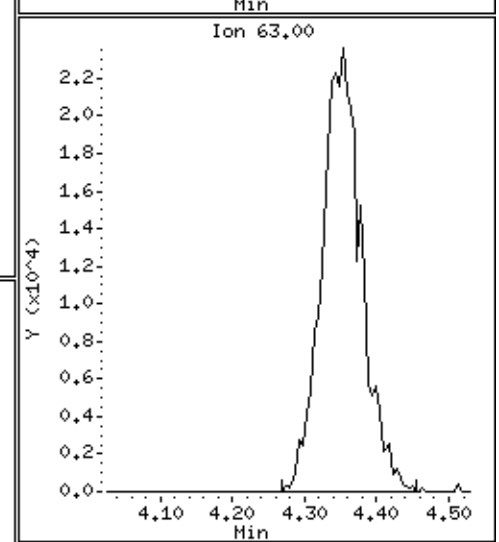


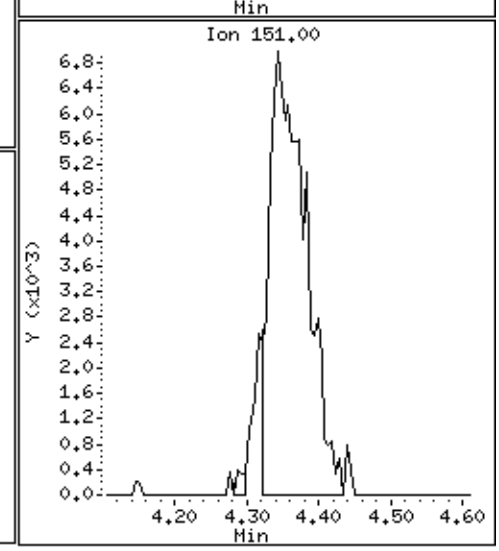












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

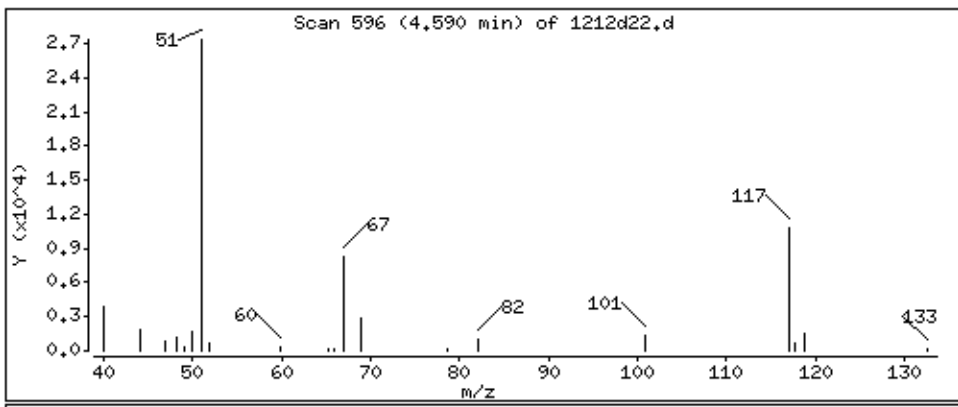
Operator: GEM

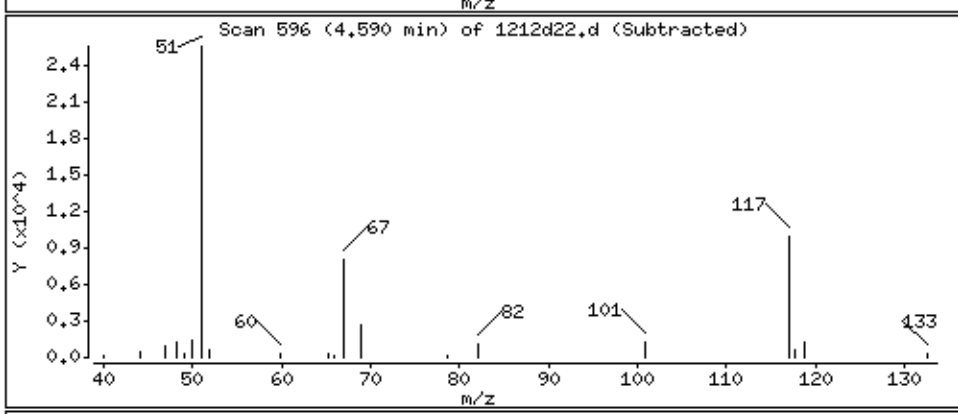
Column phase: DB-624

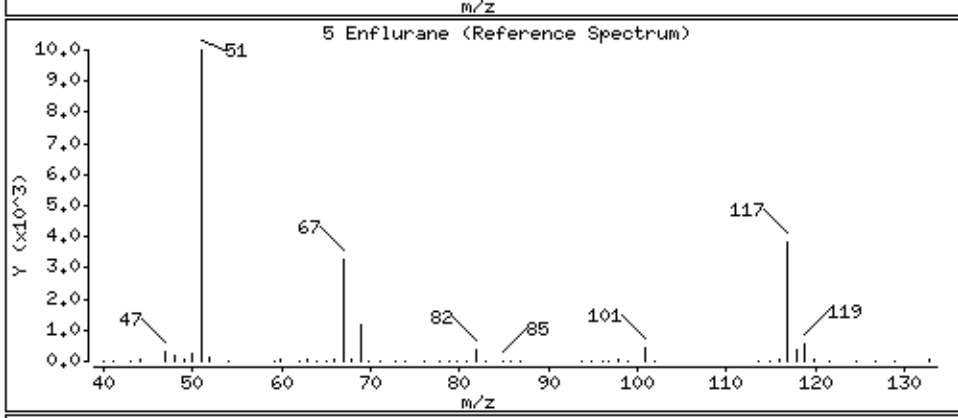
Column diameter: 0.18

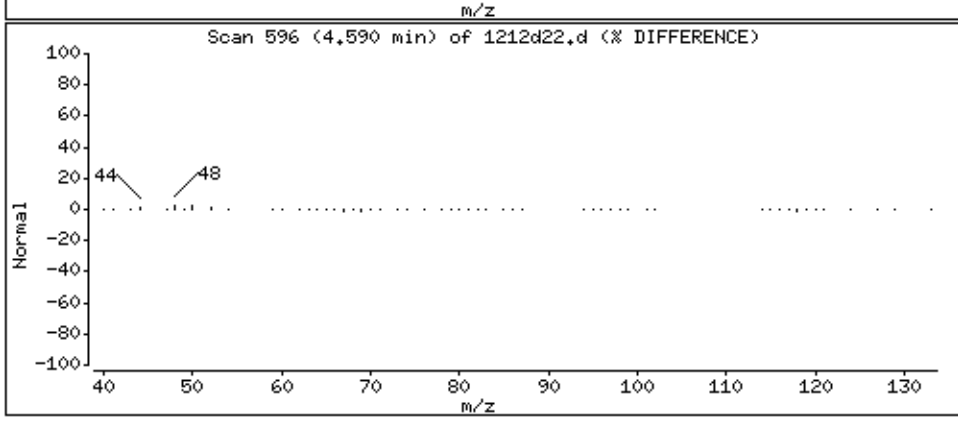
5 Enflurane

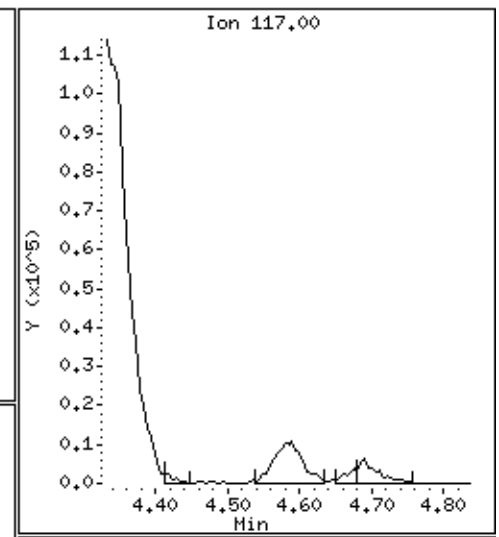
Concentration: 5.84 ug/L

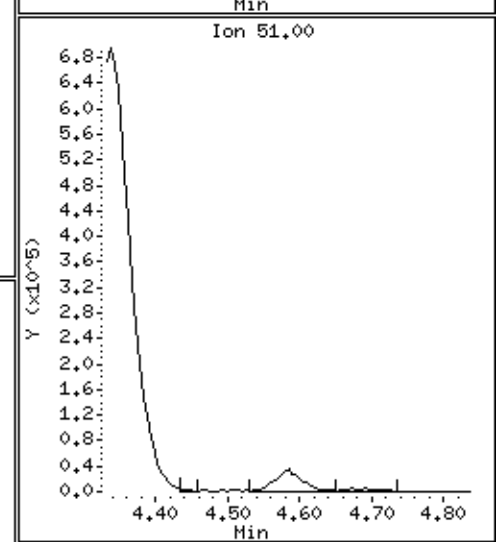


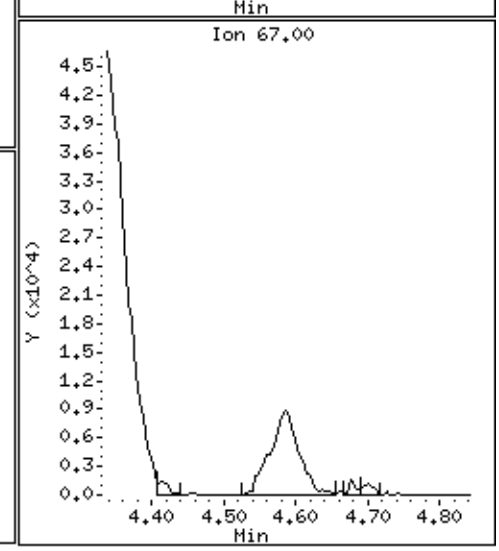












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

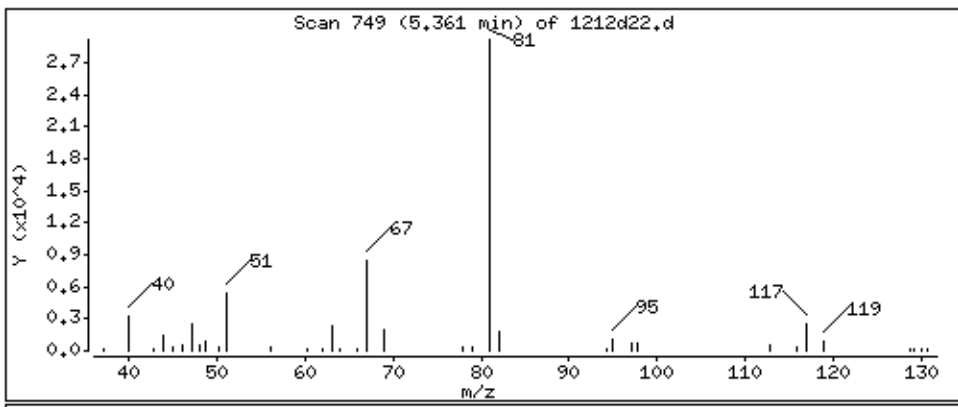
Operator: GEM

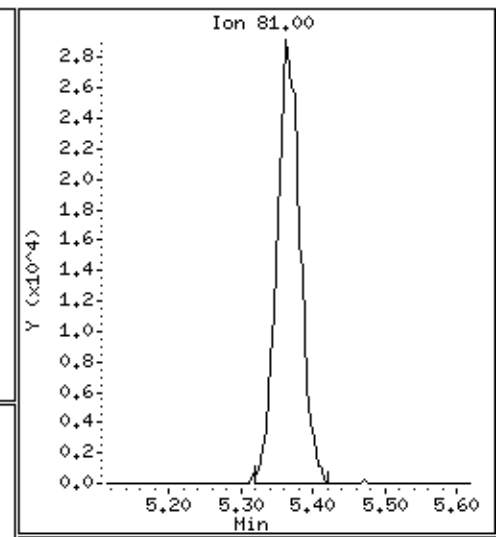
Column phase: DB-624

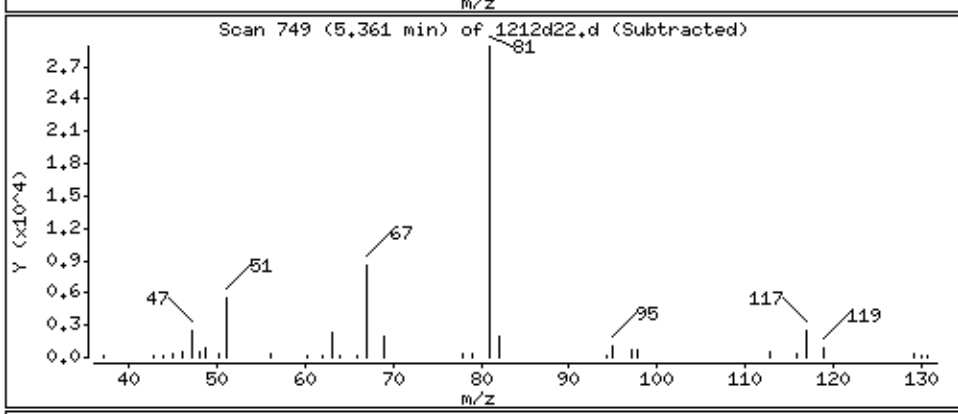
Column diameter: 0.18

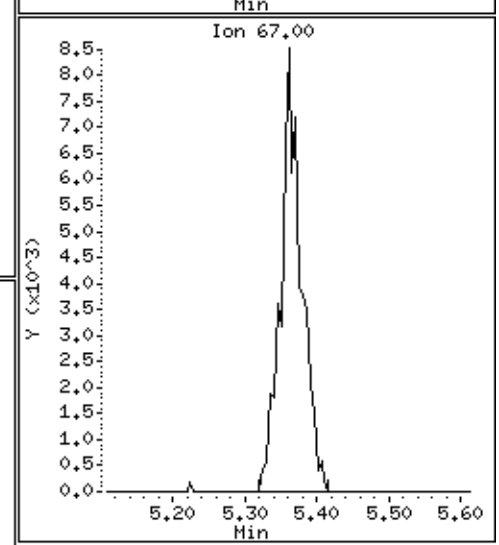
6 Halomar

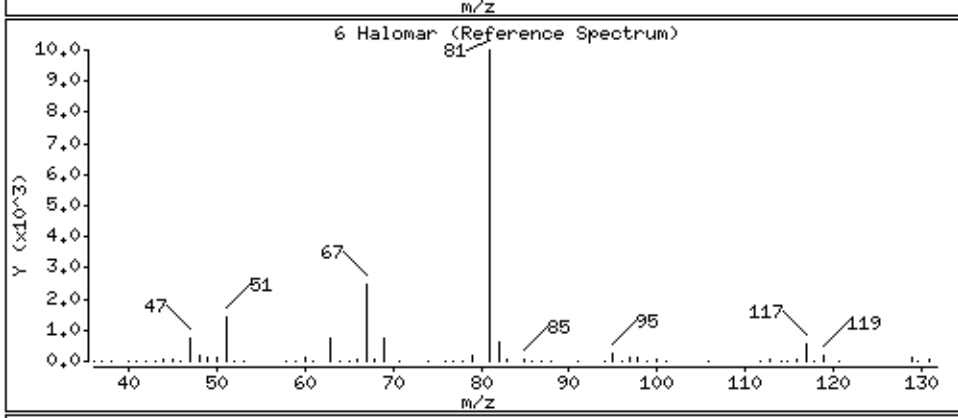
Concentration: 5.97 ug/L

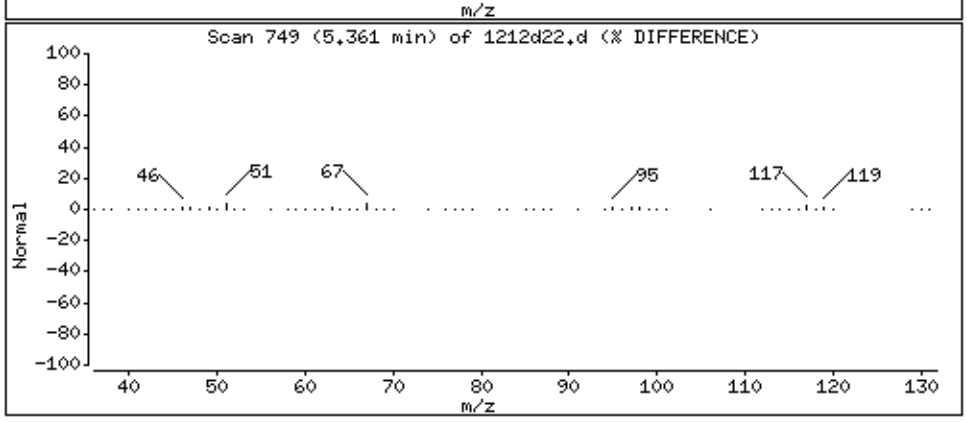












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

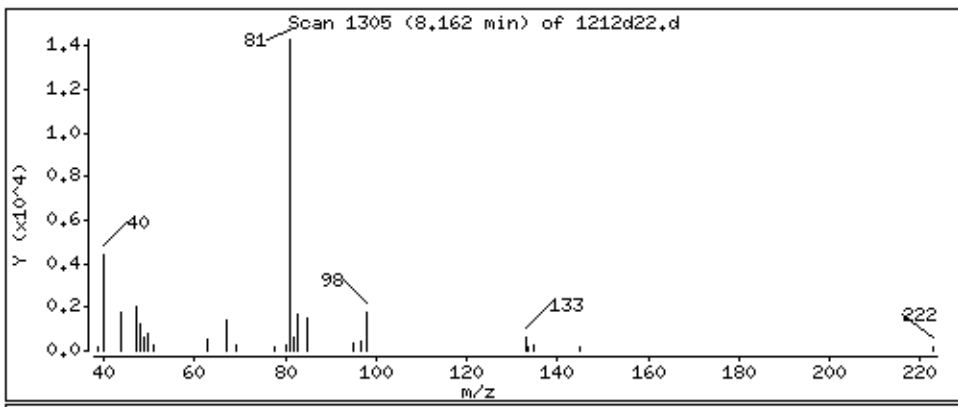
Operator: GEM

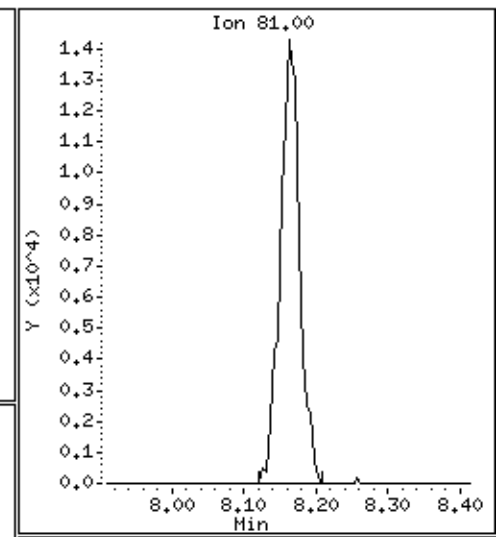
Column phase: DB-624

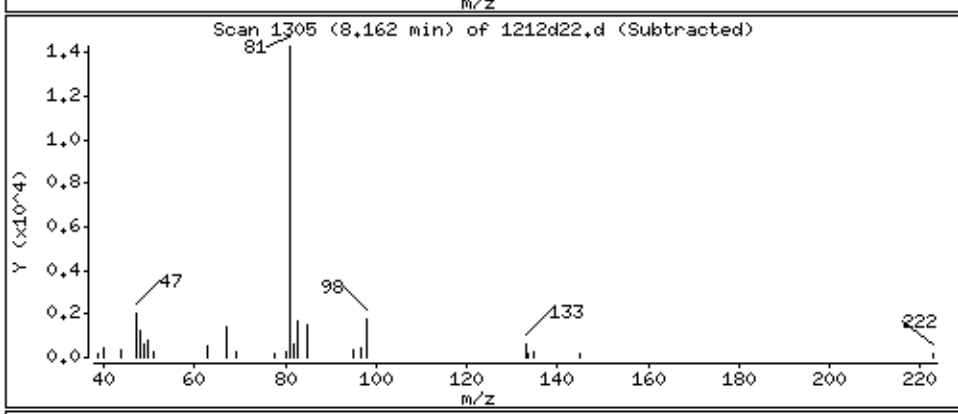
Column diameter: 0.18

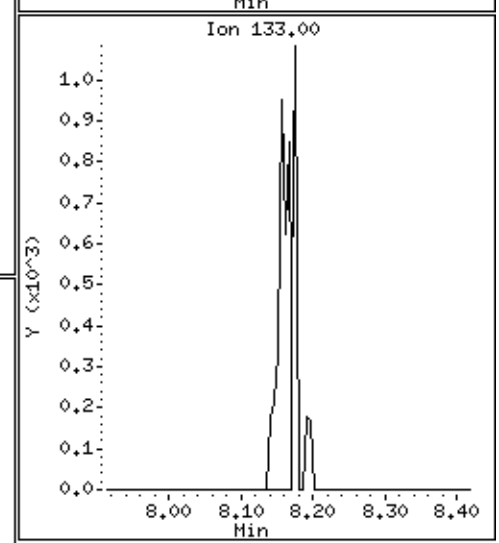
12 Methoxyflurane

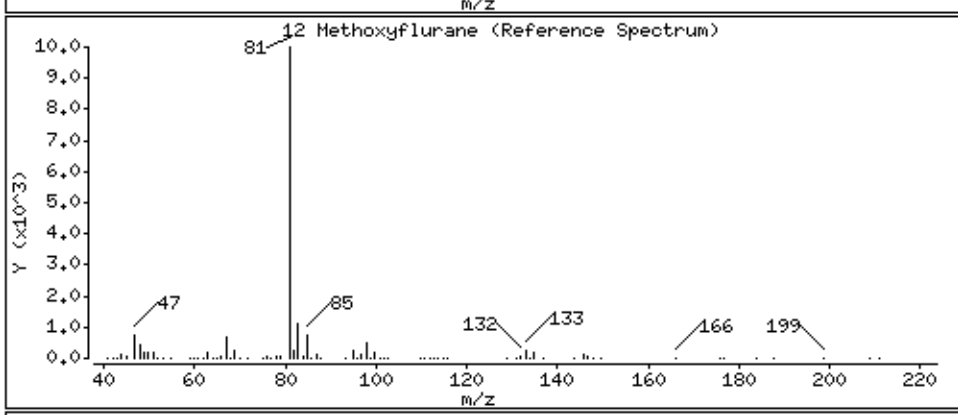
Concentration: 1.69 ug/L

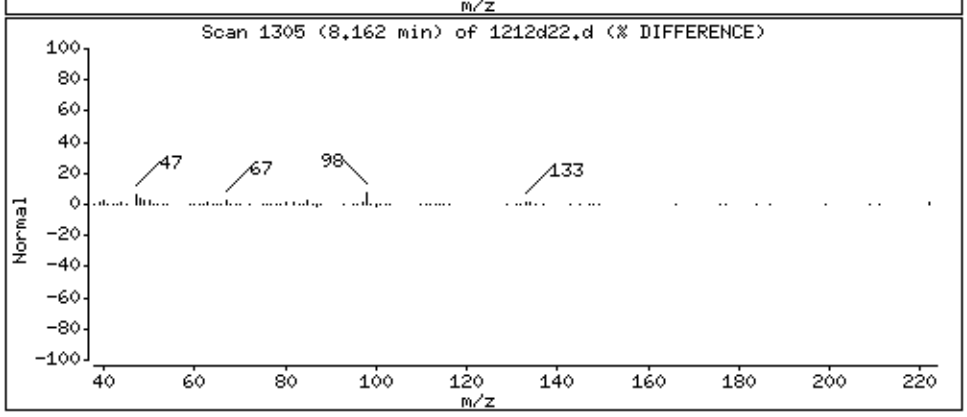












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d22.d

Date : 12-DEC-2017 14:58

Client ID: MW-4B-2

Instrument: 20msvd.i

Sample Info: 2066645008

Purge Volume: 5.0

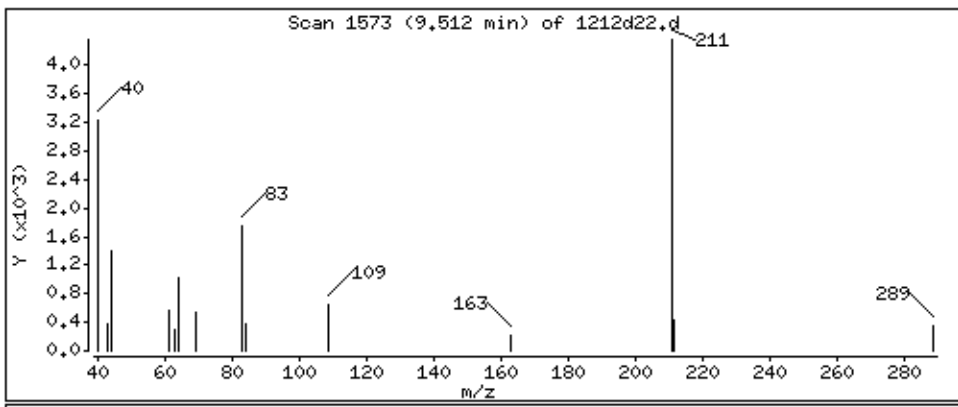
Operator: GEM

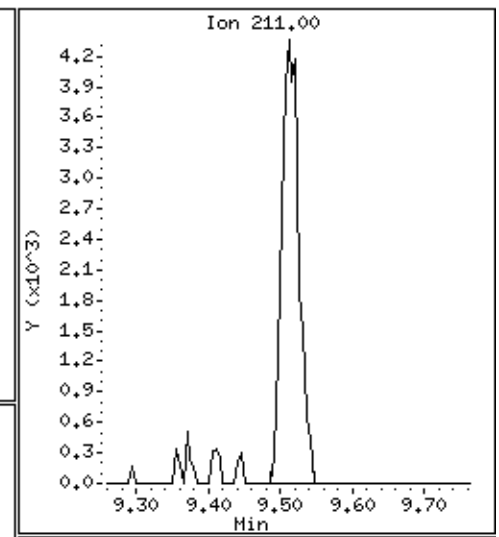
Column phase: DB-624

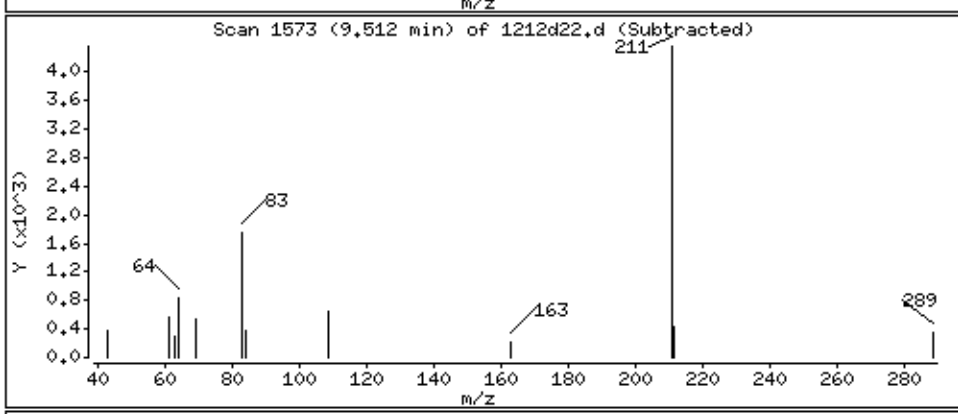
Column diameter: 0.18

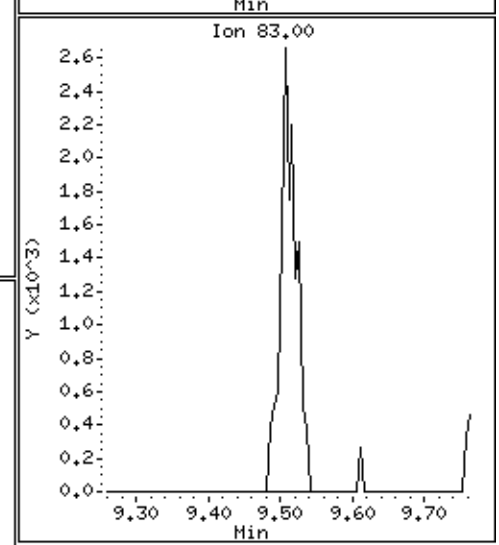
13 Haloether 528

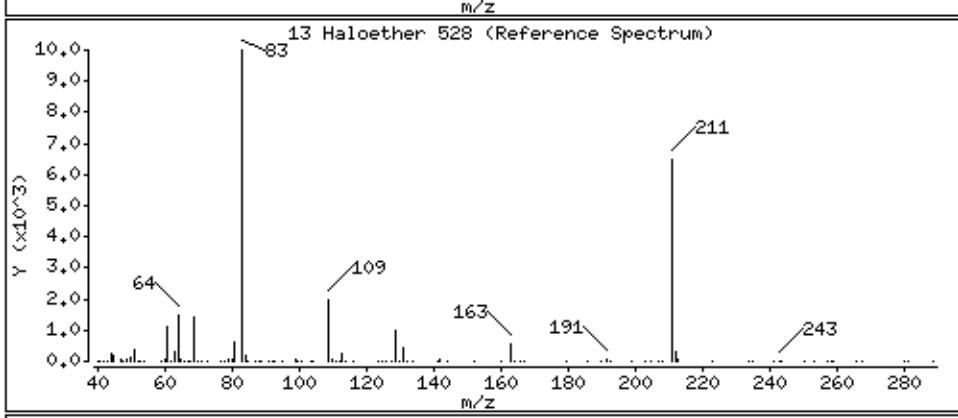
Concentration: 0.547 ug/L

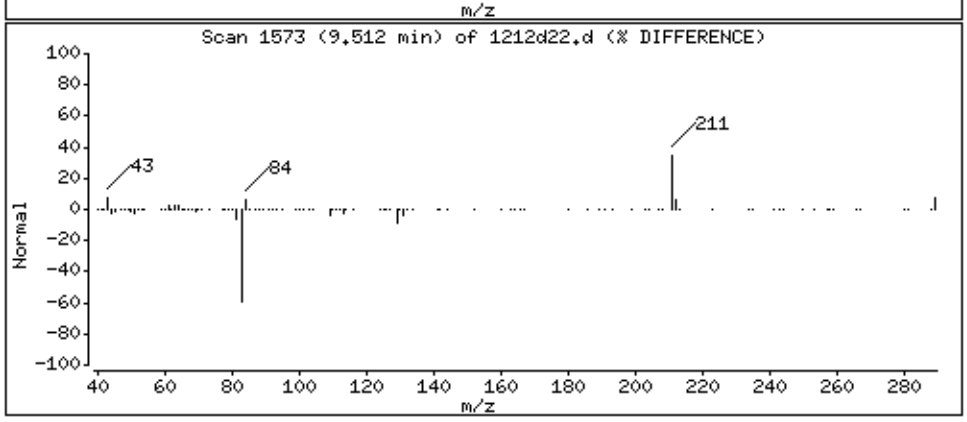












Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d22.d
Injection Date: 12-DEC-2017 14:58
Instrument: 20msvd.i
Lab Sample ID: 2066645008
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-4B-4

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:16
Lab Sample ID: 2066645009
Date Analyzed: 12/12/2017 15:16
Lab File ID: 121217HA.B\1212D23.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

SAMPLE NO.

MW-4B-4

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:16
Lab Sample ID: 2066645009
Date Analyzed: 12/12/2017 15:16
Lab File ID: 121217.B\1212D23.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	5.6	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	1.4	
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-4B-4

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:16
Lab Sample ID: 2066645009
Date Analyzed: 12/12/2017 15:16
Lab File ID: 121217.B\1212D23.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d23.d
Lab Smp Id: 2066645009 Client Smp ID: MW-4B-4
Inj Date : 12-DEC-2017 15:16
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645009
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.161	4.146	(0.625)	7670	5.64854	5.65	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						(D
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.927)	303993	51.1680	51.2	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.655	6.645	(1.000)	269863	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	867945	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	972677	50.0864	50.1	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	8.902	8.897	(0.909)	7137	1.44836	1.45	
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	371558	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	373727	51.9651	52.0	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	363680	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d23.d
Lab Smp Id: 2066645009 Client Smp ID: MW-4B-4
Inj Date : 12-DEC-2017 15:16
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645009
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

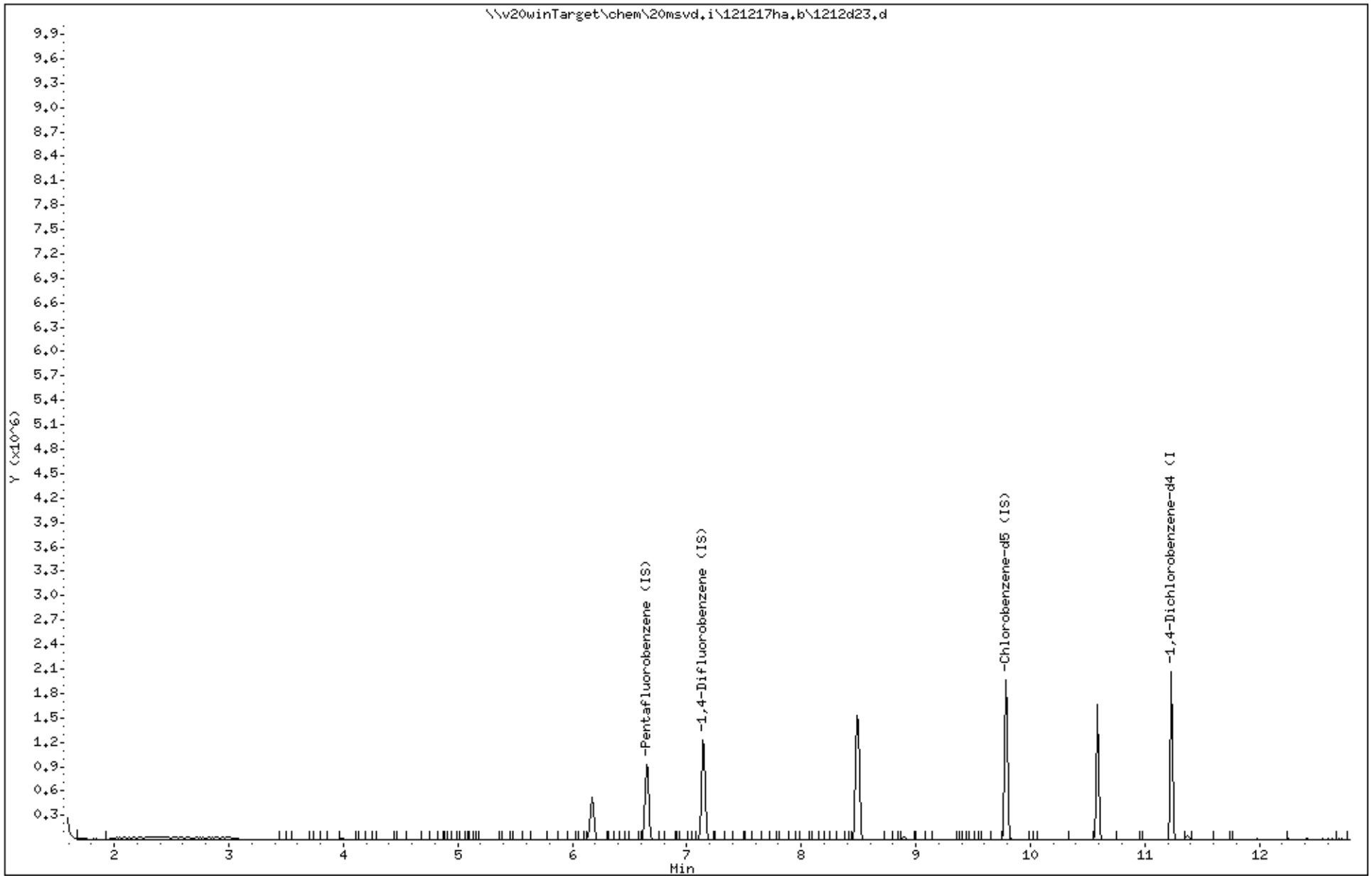
Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.655	6.645	(1.000)	269863	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	870709	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	371558	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	363680	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d23.d
Date : 12-DEC-2017 15:16
Client ID: MW-4B-4
Sample Info: 2066645009
Purge Volume: 5.0
Column phase: DB-624

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.18



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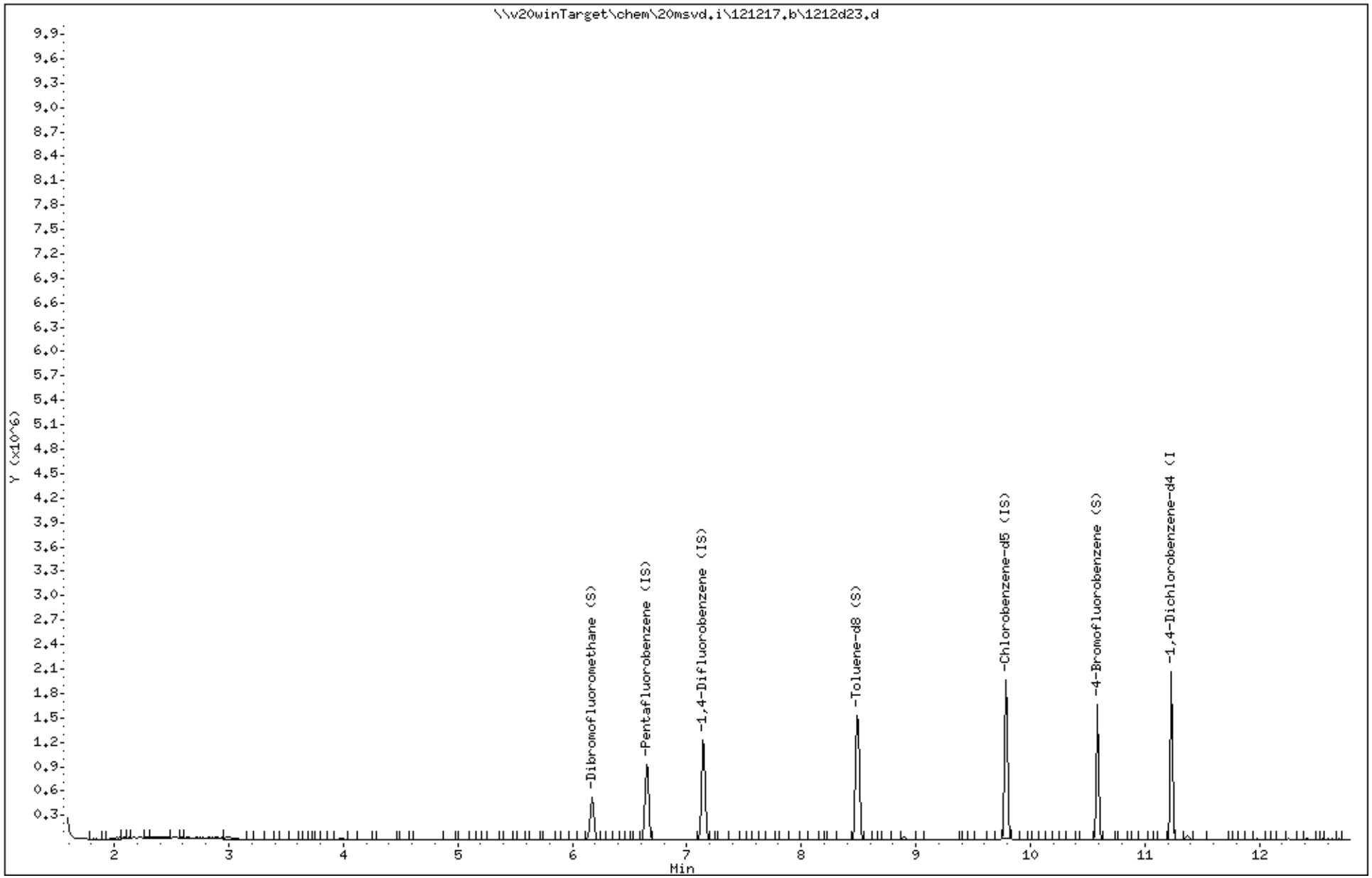
Injection Date: 12-DEC-2017 15:16
Instrument: 20msvd.i
Lab Sample ID: 2066645009
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d23.d
Date : 12-DEC-2017 15:16
Client ID: MW-4B-4
Sample Info: 2066645009
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



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Date : 12-DEC-2017 15:16

Client ID: MW-4B-4

Instrument: 20msvd.i

Sample Info: 2066645009

Purge Volume: 5.0

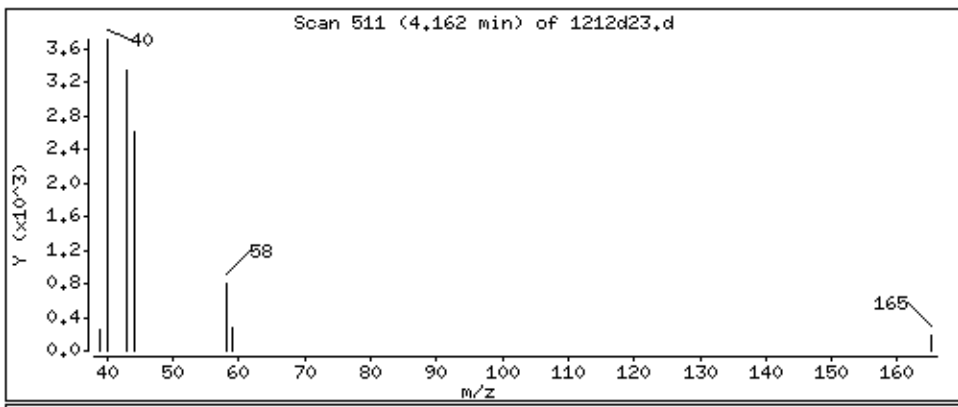
Operator: GEM

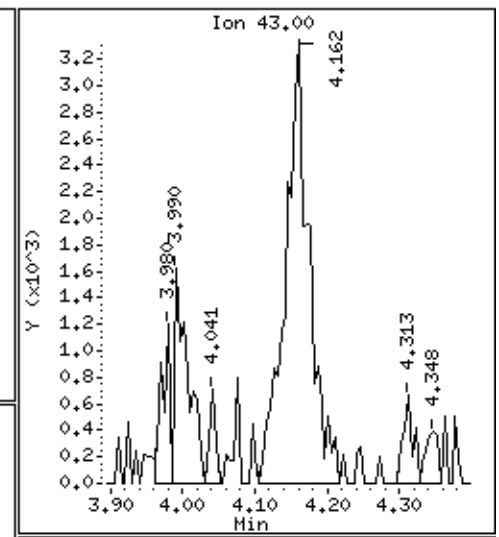
Column phase: RTX VMS 30m

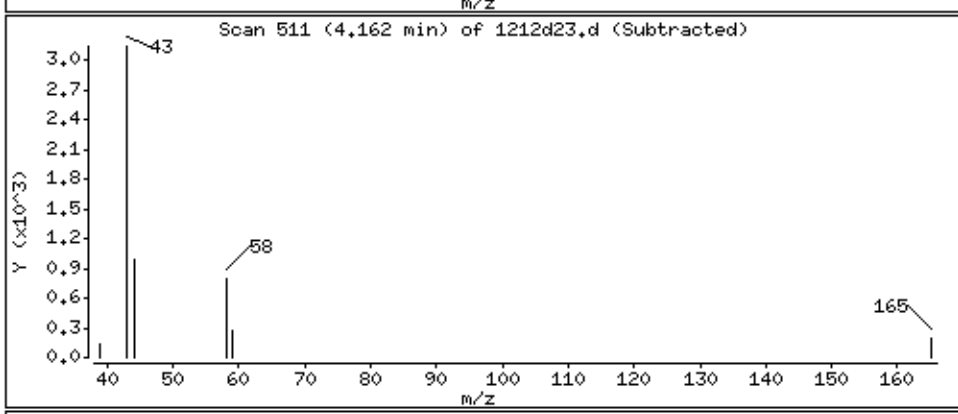
Column diameter: 0.25

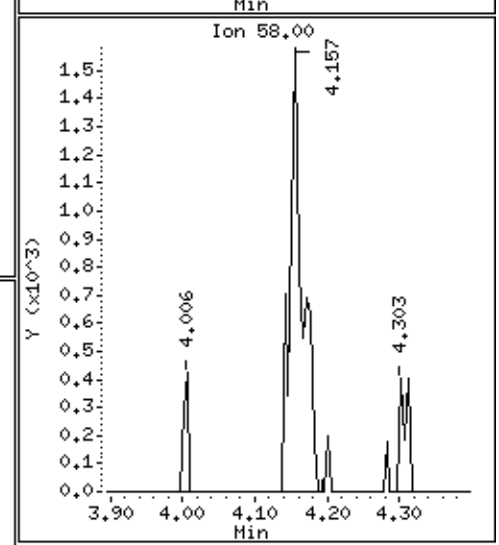
14 Acetone

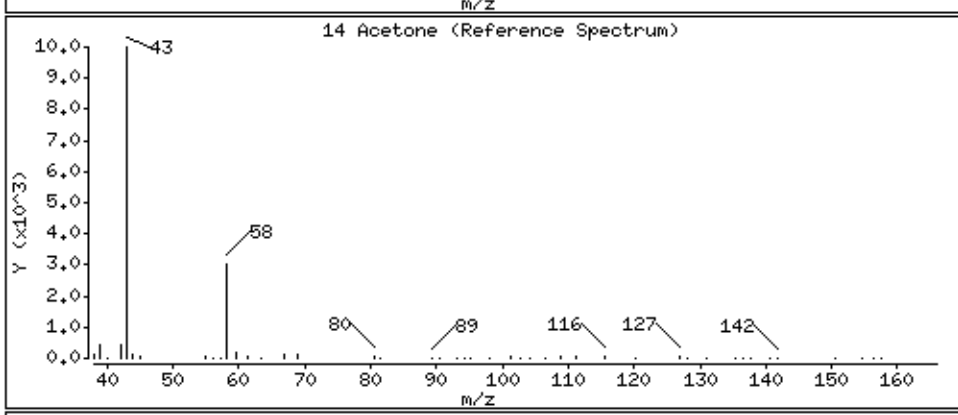
Concentration: 5.65 ug/L

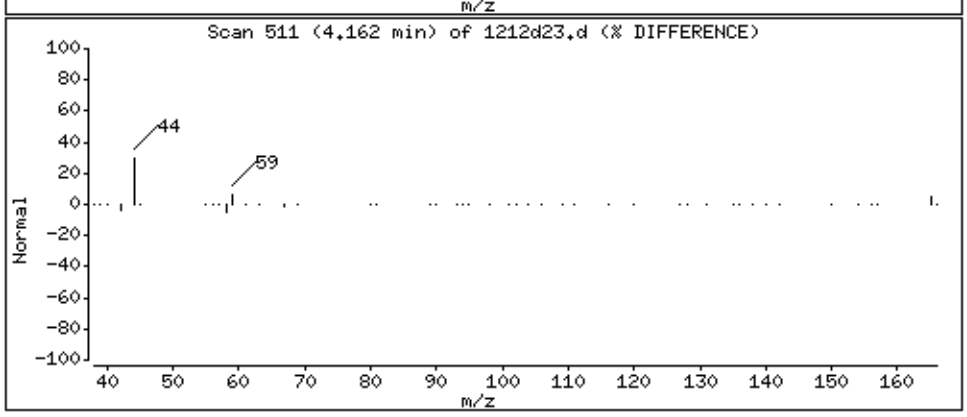












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d23.d

Date : 12-DEC-2017 15:16

Client ID: MW-4B-4

Instrument: 20msvd.i

Sample Info: 2066645009

Purge Volume: 5.0

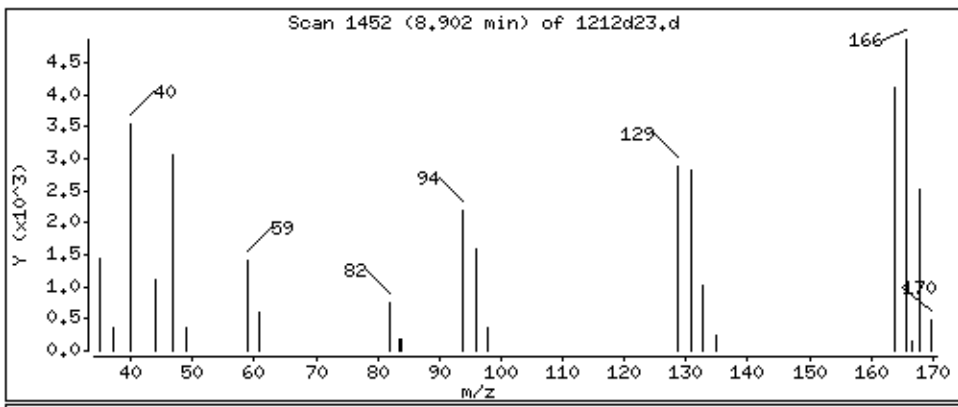
Operator: GEM

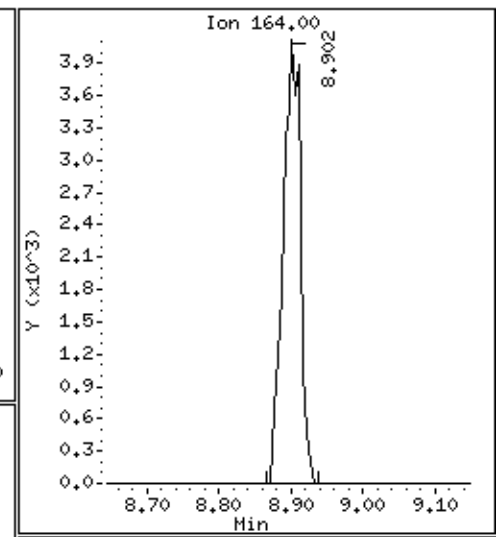
Column phase: RTX VMS 30m

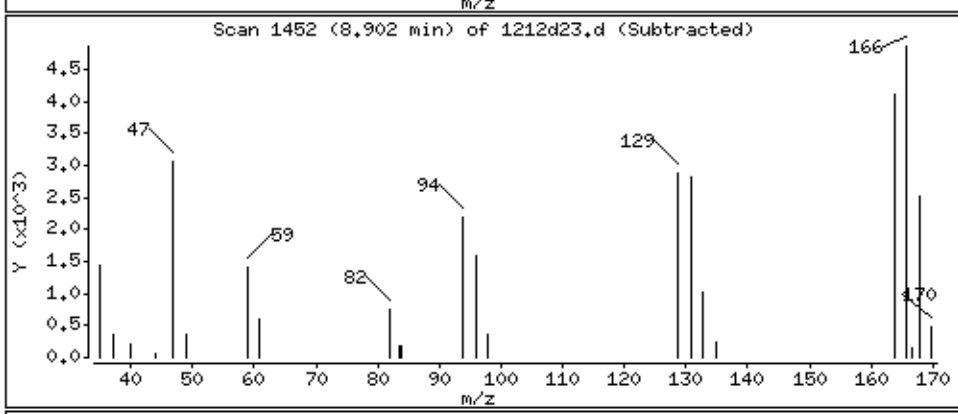
Column diameter: 0.25

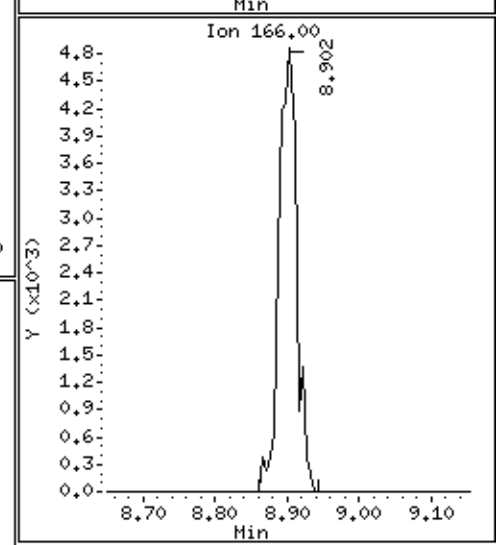
53 Tetrachloroethene

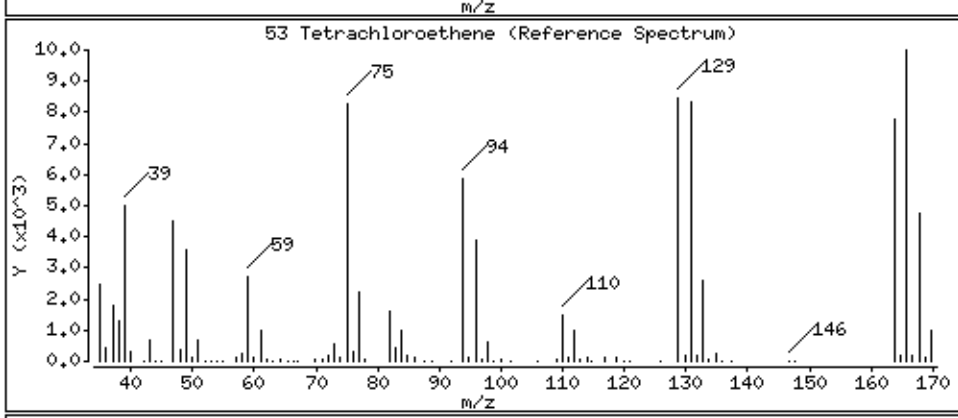
Concentration: 1.45 ug/L

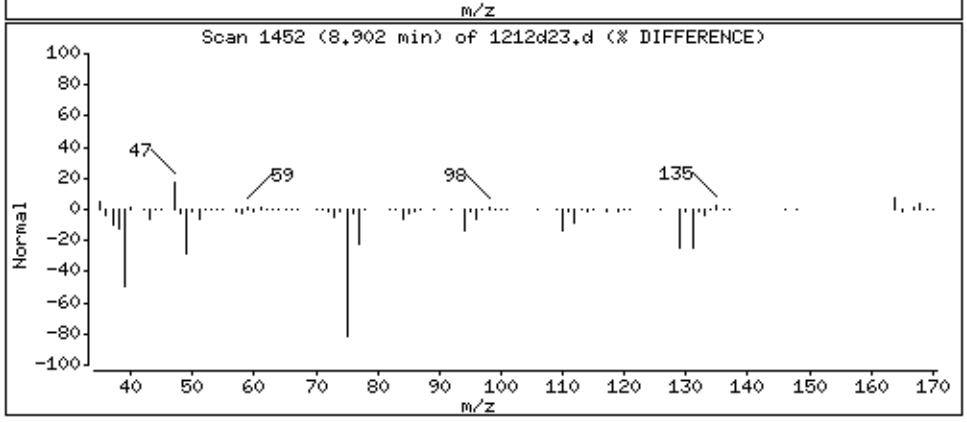












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Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d23.d
Injection Date: 12-DEC-2017 15:16
Instrument: 20msvd.i
Lab Sample ID: 2066645009
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-1

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:34
Lab Sample ID: 2066645010
Date Analyzed: 12/12/2017 15:34
Lab File ID: 121217.B\1212D24.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	8.4	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	2.2	
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-1

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:34
Lab Sample ID: 2066645010
Date Analyzed: 12/12/2017 15:34
Lab File ID: 121217.B\1212D24.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MW-1

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:34
Lab Sample ID: 2066645010
Date Analyzed: 12/12/2017 15:34
Lab File ID: 121217HA.B\1212D24.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d24.d
Lab Smp Id: 2066645010 Client Smp ID: MW-1
Inj Date : 12-DEC-2017 15:34
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645010
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.161	4.146	(0.626)	11593	8.37656	8.38(M)	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	5.688	5.693	(0.855)	1631	0.27411	0.274(M)	
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	297755	48.9099	48.9	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	276529	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						(D
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	7.103	7.108	(0.994)	3428	0.55645	0.556	
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	895160	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1006012	50.2280	50.2	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	8.897	8.897	(0.909)	10819	2.17317	2.17	
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	375388	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	372566	51.9441	51.9	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D
	76 2-Chlorotoluene	91	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
	77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
	79 4-Chlorotoluene	91	Compound Not Detected.						
	80 tert-Butylbenzene	91	Compound Not Detected.						
	81 Pentachloroethane	167	Compound Not Detected.						
	82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	83 sec-Butylbenzene	105	Compound Not Detected.						
	84 p-Isopropyltoluene	119	Compound Not Detected.						
	85 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	362697	50.0000		
	87 1,4-Dichlorobenzene	146	Compound Not Detected.						
	88 n-Butylbenzene	91	Compound Not Detected.						(D
	89 1,2-Dichlorobenzene	146	Compound Not Detected.						
	90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
	91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	93 Naphthalene	128	Compound Not Detected.						
	94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d24.d
Lab Smp Id: 2066645010 Client Smp ID: MW-1
Inj Date : 12-DEC-2017 15:34
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645010
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	276529	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	895637	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	375388	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	362697	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d24.d

Date : 12-DEC-2017 15:34

Client ID: MW-1

Instrument: 20msvd.i

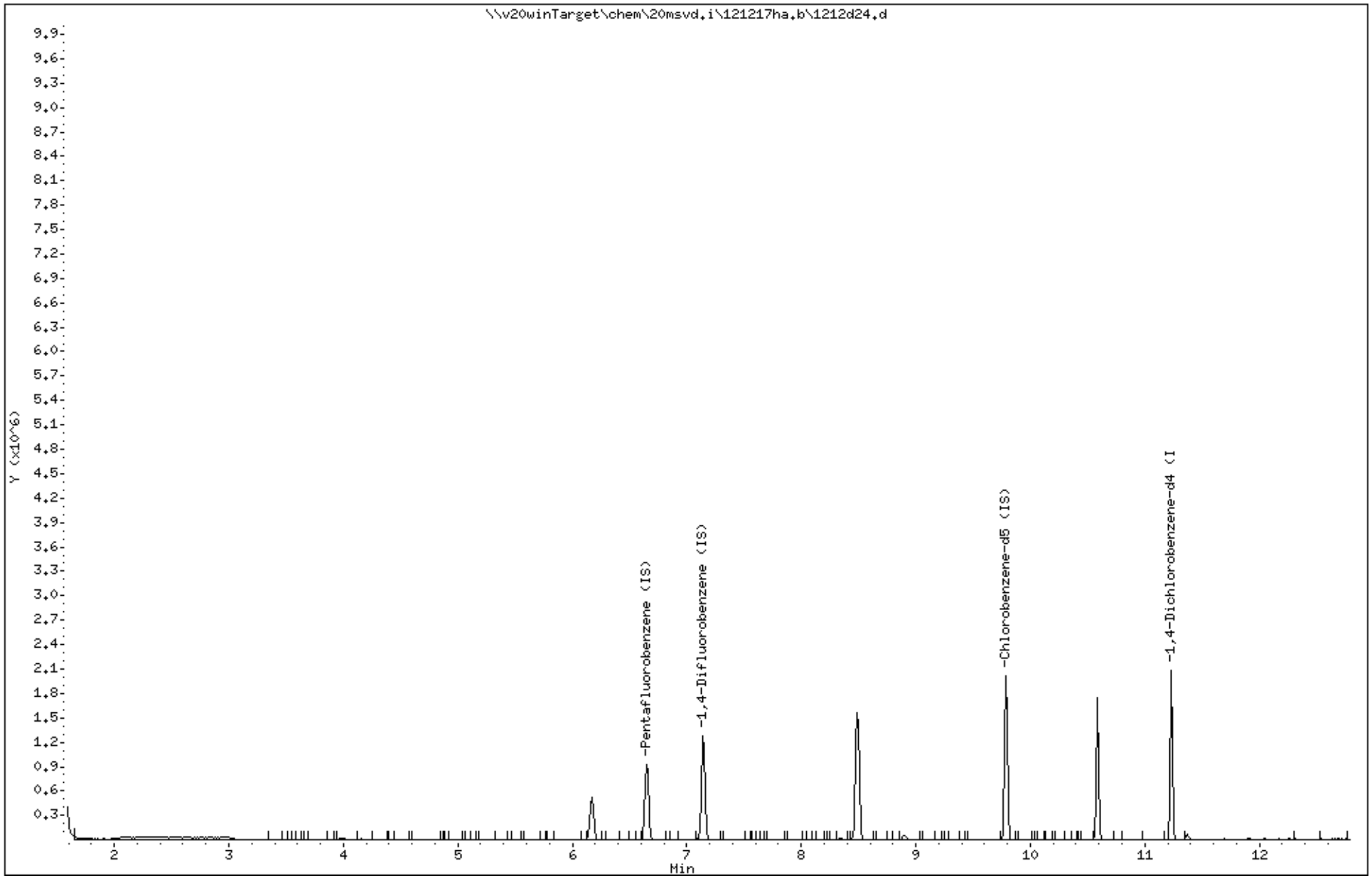
Sample Info: 2066645010

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

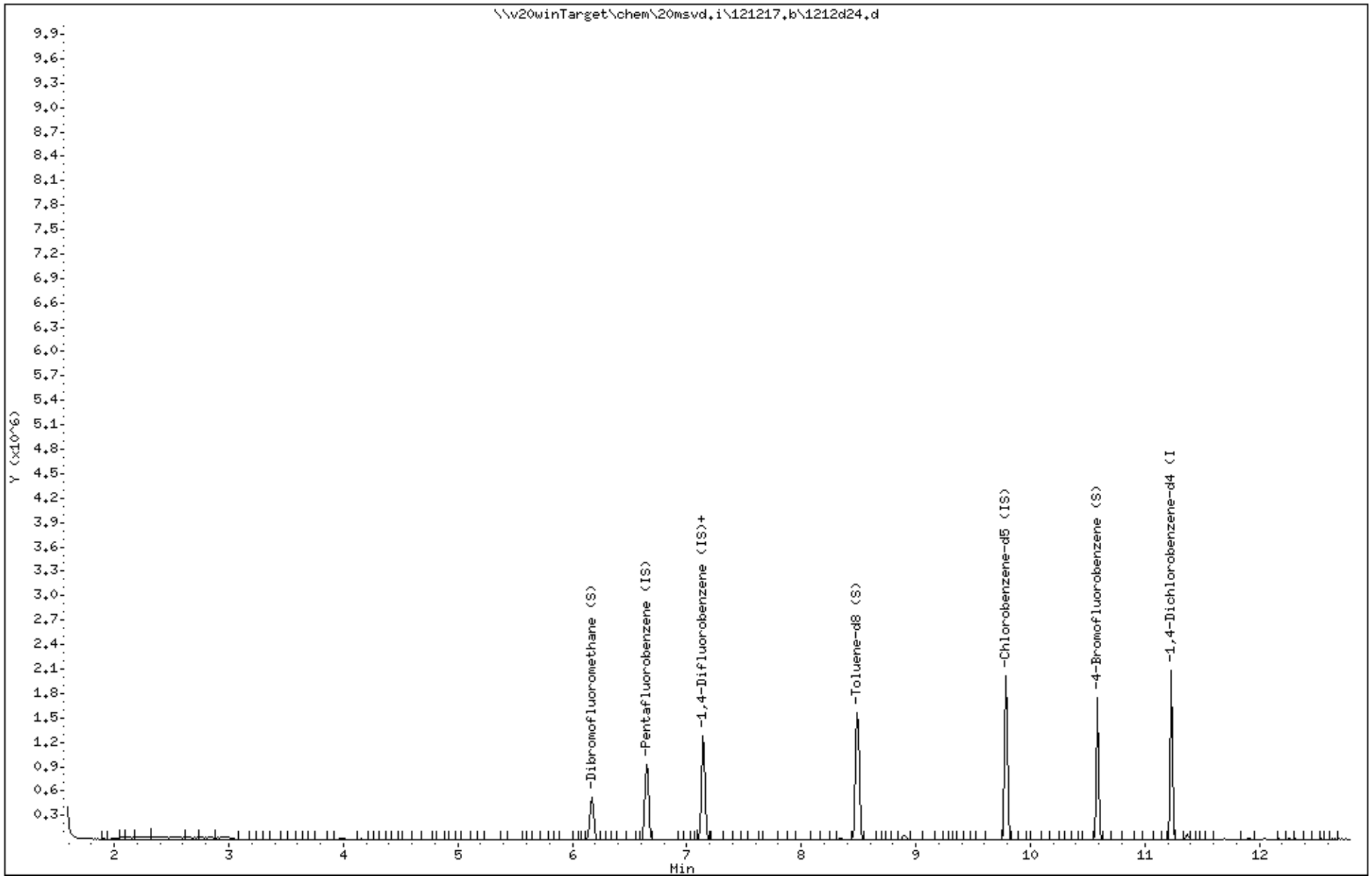
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d24.d
Injection Date: 12-DEC-2017 15:34
Instrument: 20msvd.i
Lab Sample ID: 2066645010
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d24.d
Date : 12-DEC-2017 15:34
Client ID: MW-1
Sample Info: 2066645010
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d24.d

Date : 12-DEC-2017 15:34

Client ID: MW-1

Instrument: 20msvd.i

Sample Info: 2066645010

Purge Volume: 5.0

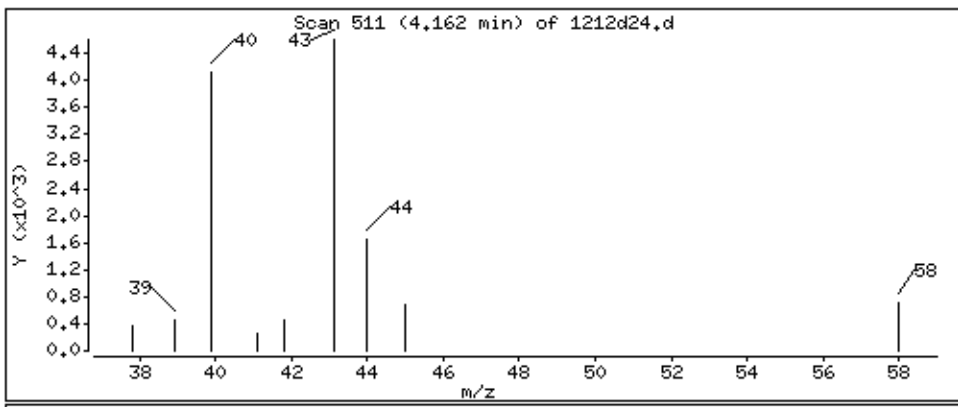
Operator: GEM

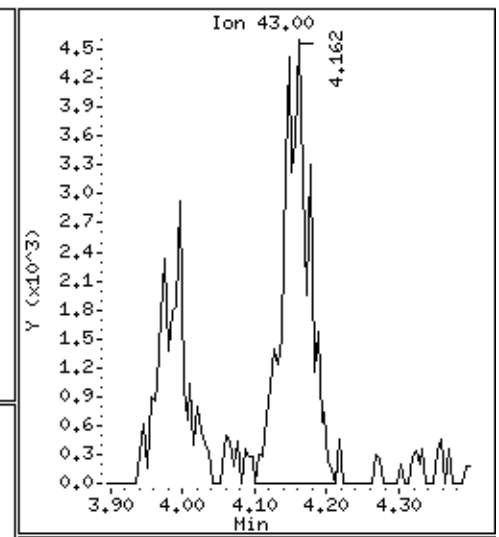
Column phase: RTX VMS 30m

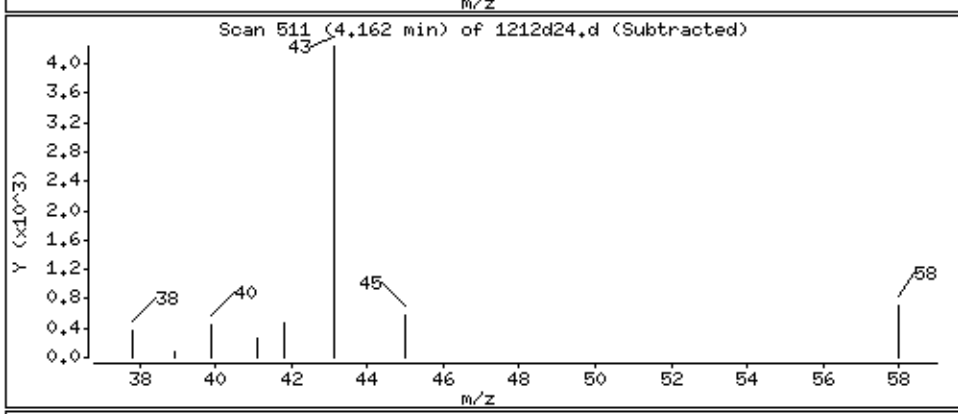
Column diameter: 0.25

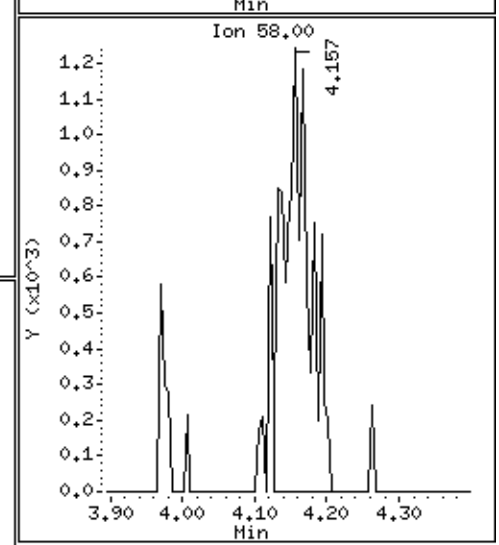
14 Acetone

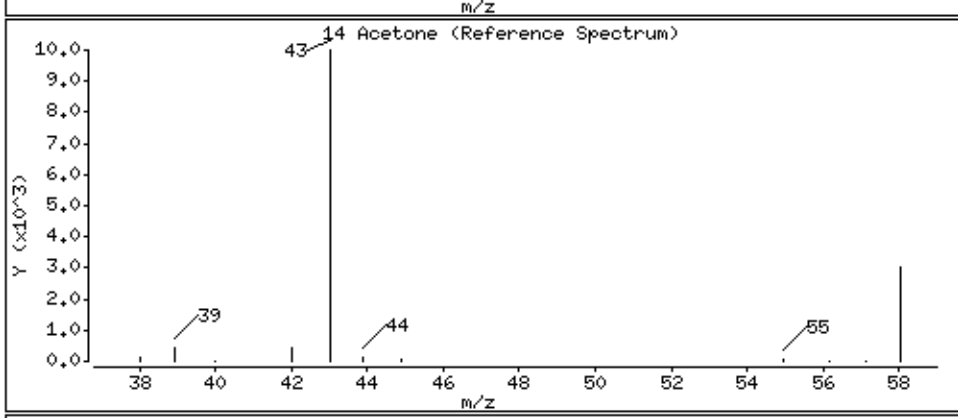
Concentration: 8.38 ug/L

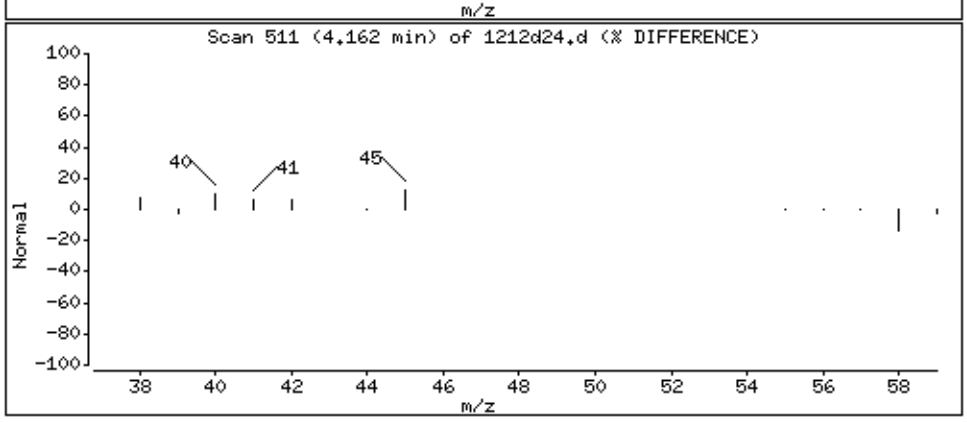












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d24.d

Date : 12-DEC-2017 15:34

Client ID: MW-1

Instrument: 20msvd.i

Sample Info: 2066645010

Purge Volume: 5.0

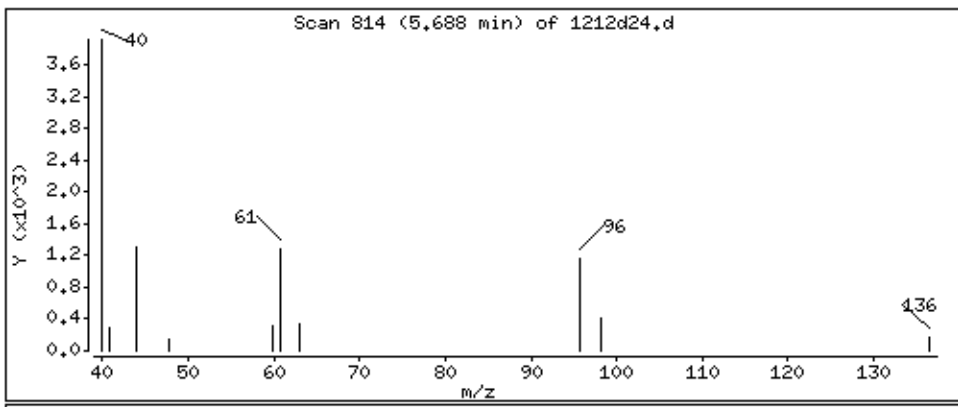
Operator: GEM

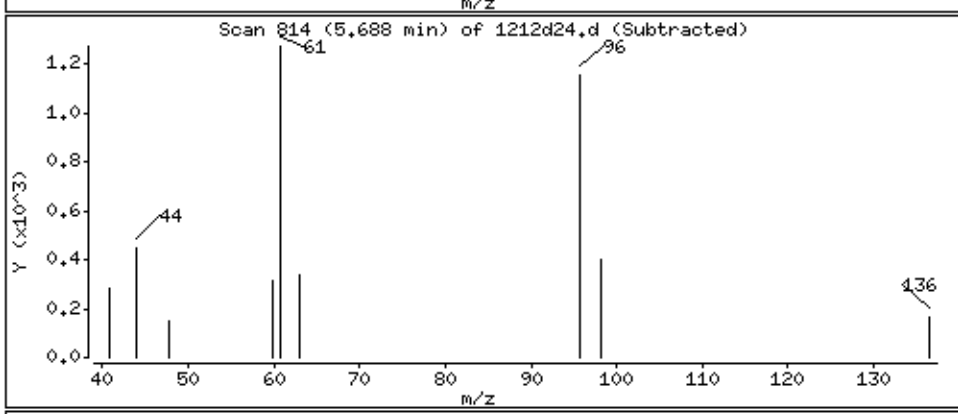
Column phase: RTX VMS 30m

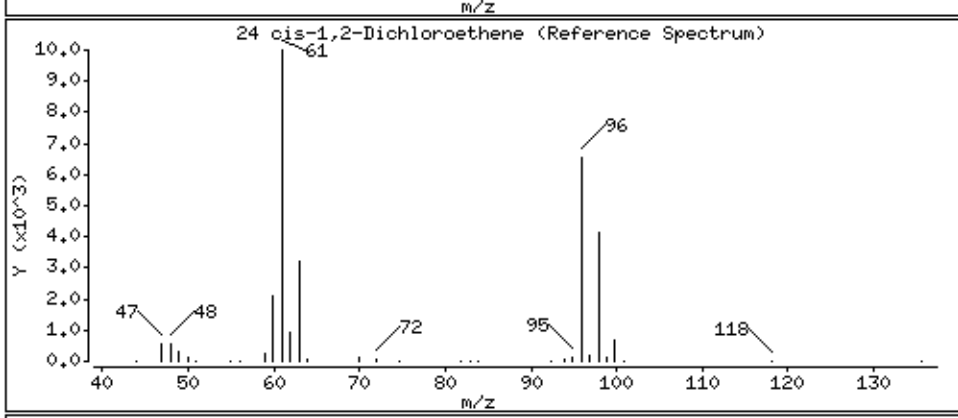
Column diameter: 0.25

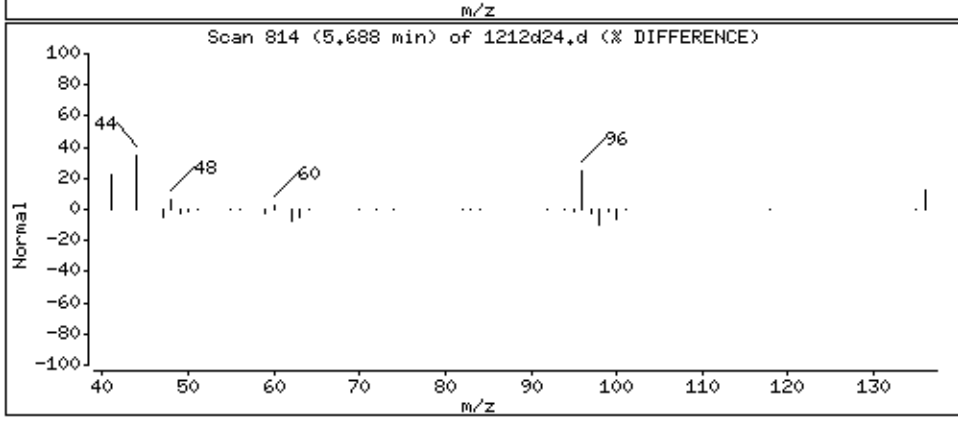
24 cis-1,2-Dichloroethene

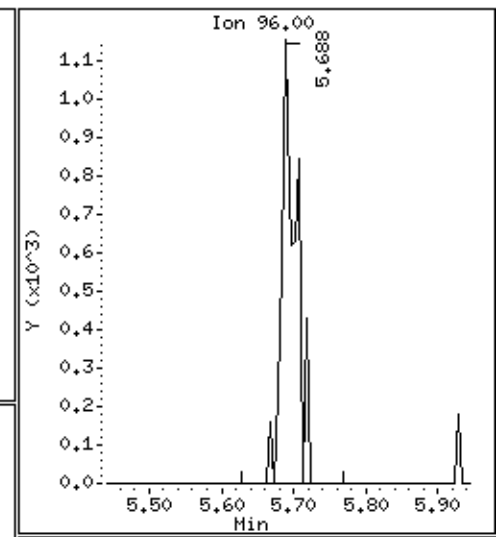
Concentration: 0.274 ug/L

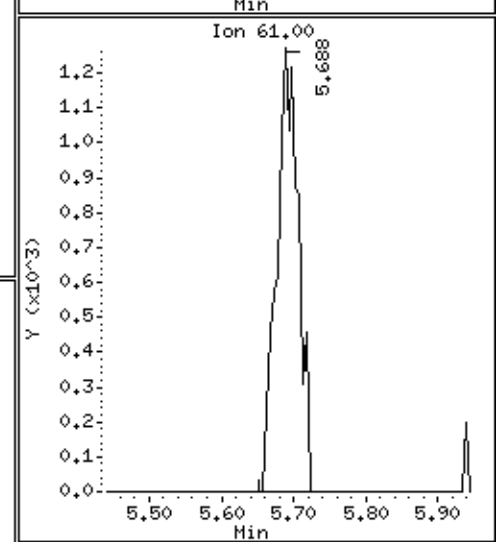


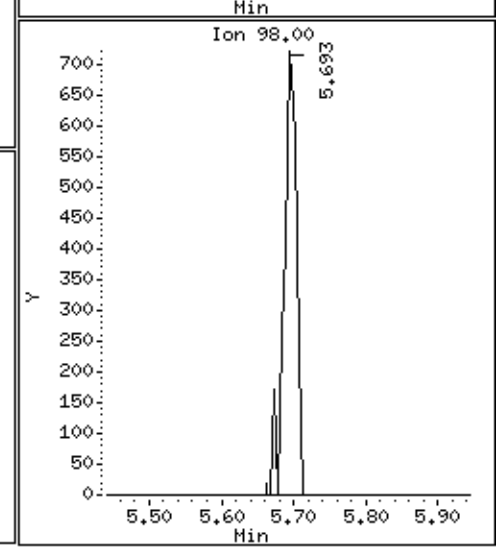












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d24.d

Date : 12-DEC-2017 15:34

Client ID: MW-1

Instrument: 20msvd.i

Sample Info: 2066645010

Purge Volume: 5.0

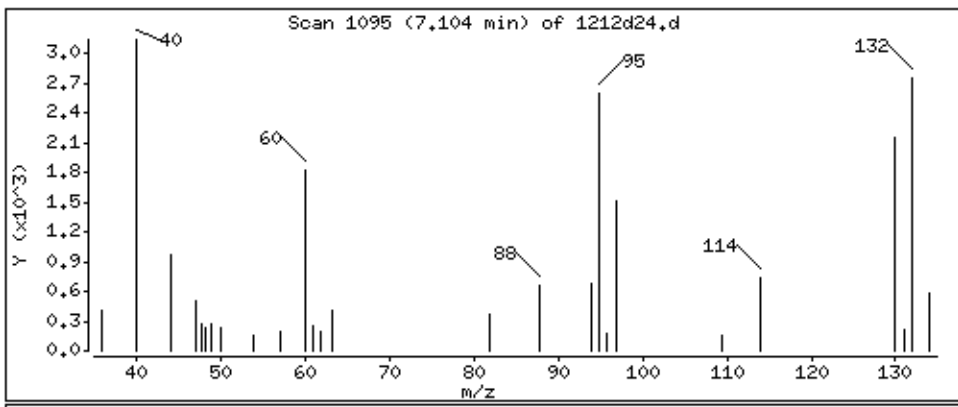
Operator: GEM

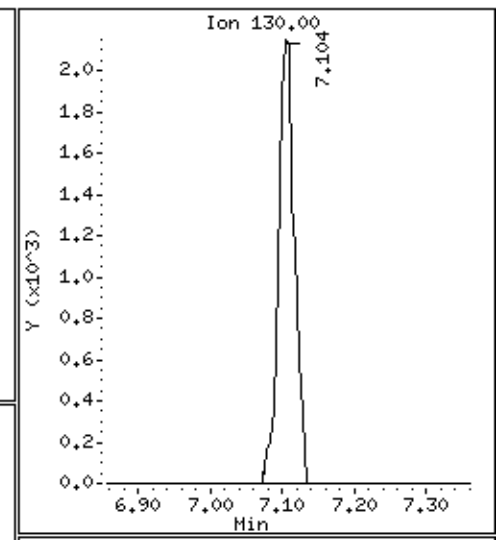
Column phase: RTX VMS 30m

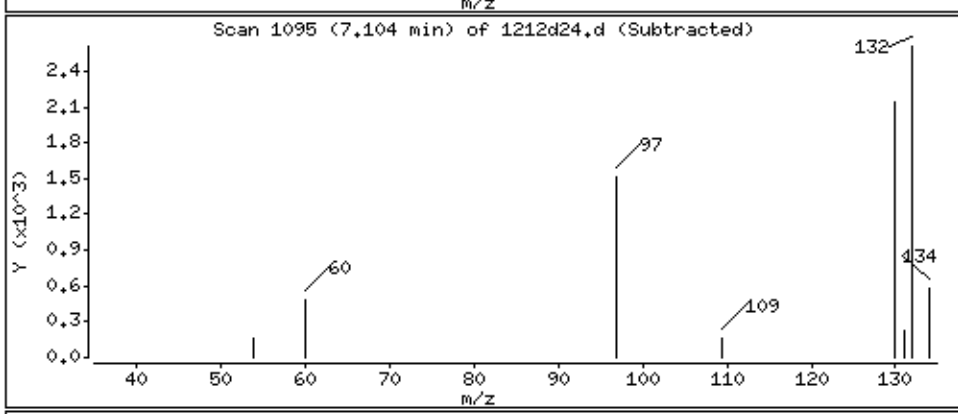
Column diameter: 0.25

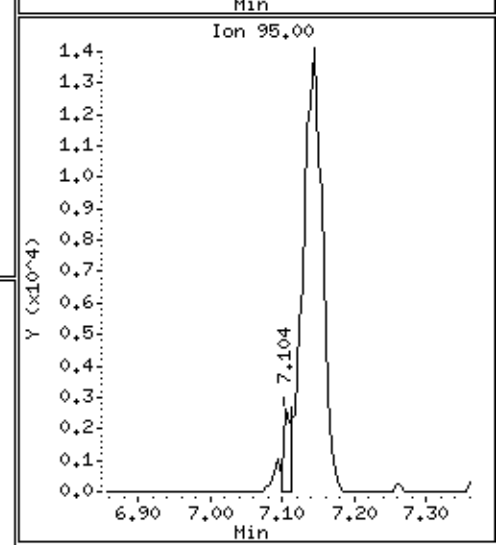
42 Trichloroethene

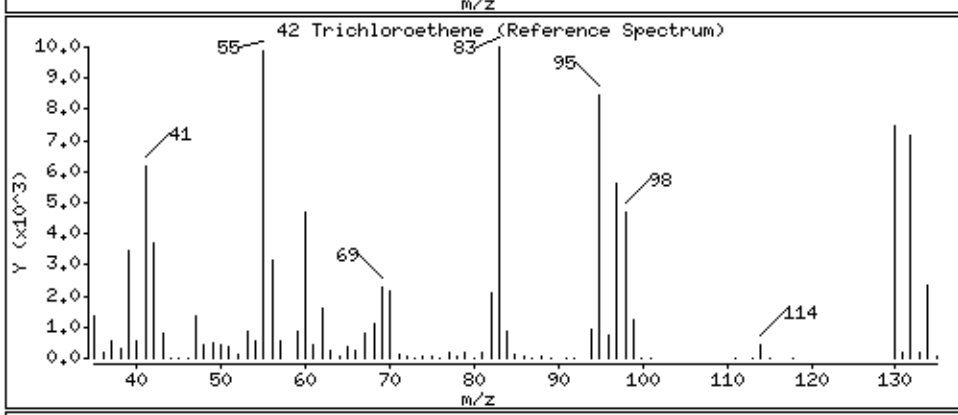
Concentration: 0.556 ug/L

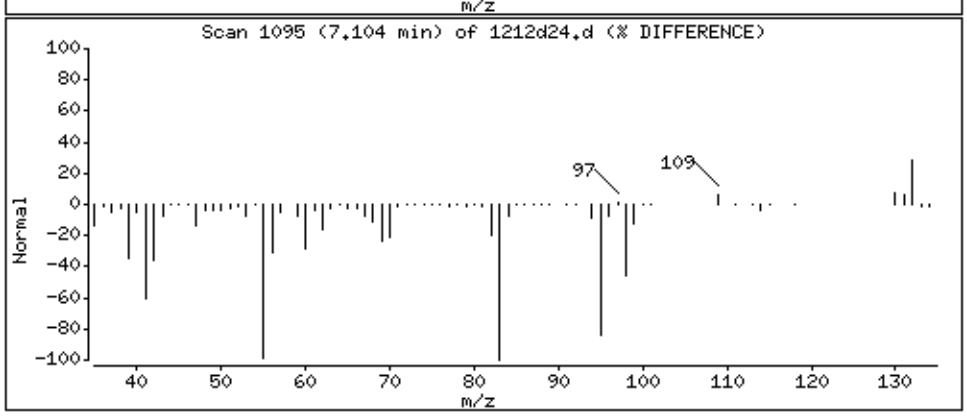












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d24.d

Date : 12-DEC-2017 15:34

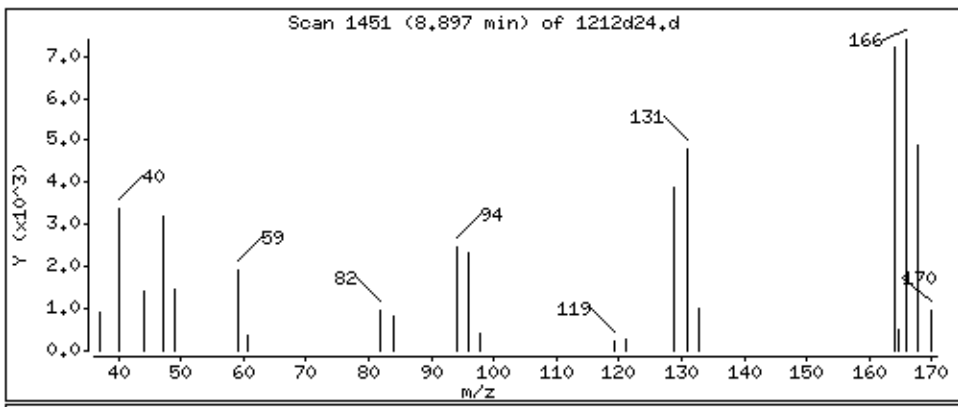
Client ID: MW-1 Instrument: 20msvd.i

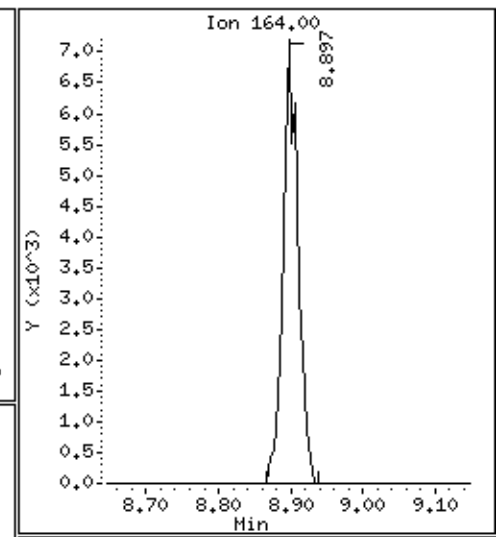
Sample Info: 2066645010

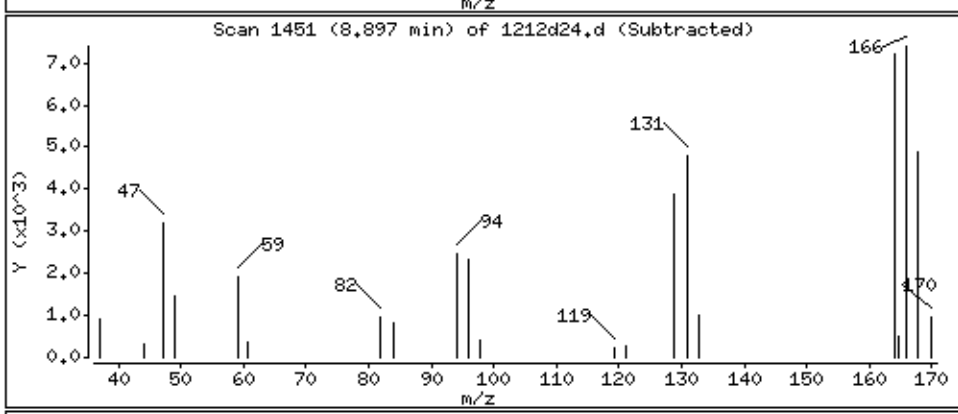
Purge Volume: 5.0 Operator: GEM

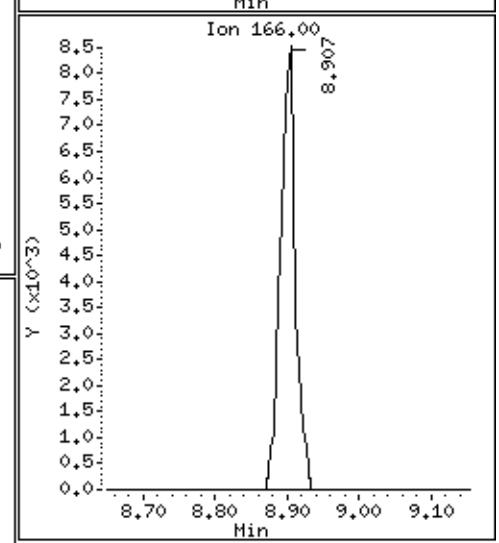
Column phase: RTX VMS 30m Column diameter: 0.25

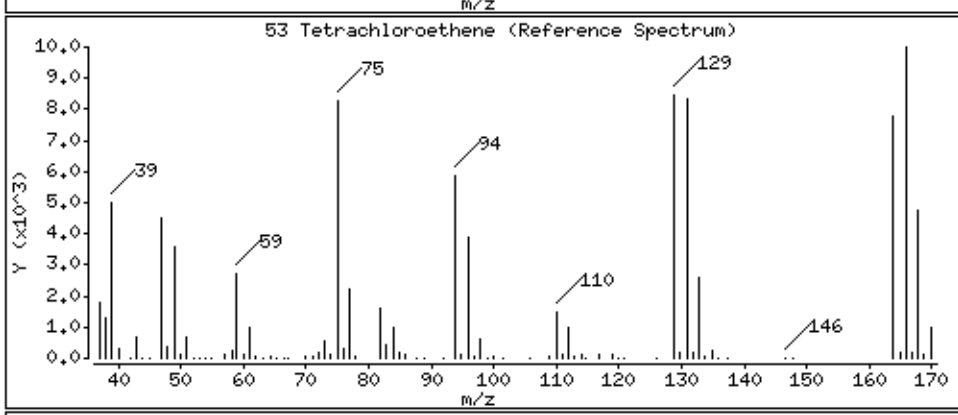
53 Tetrachloroethene Concentration: 2.17 ug/L

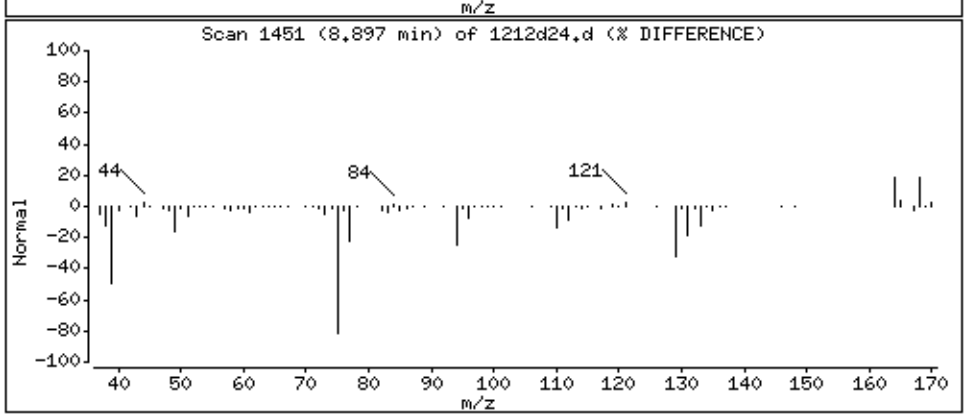












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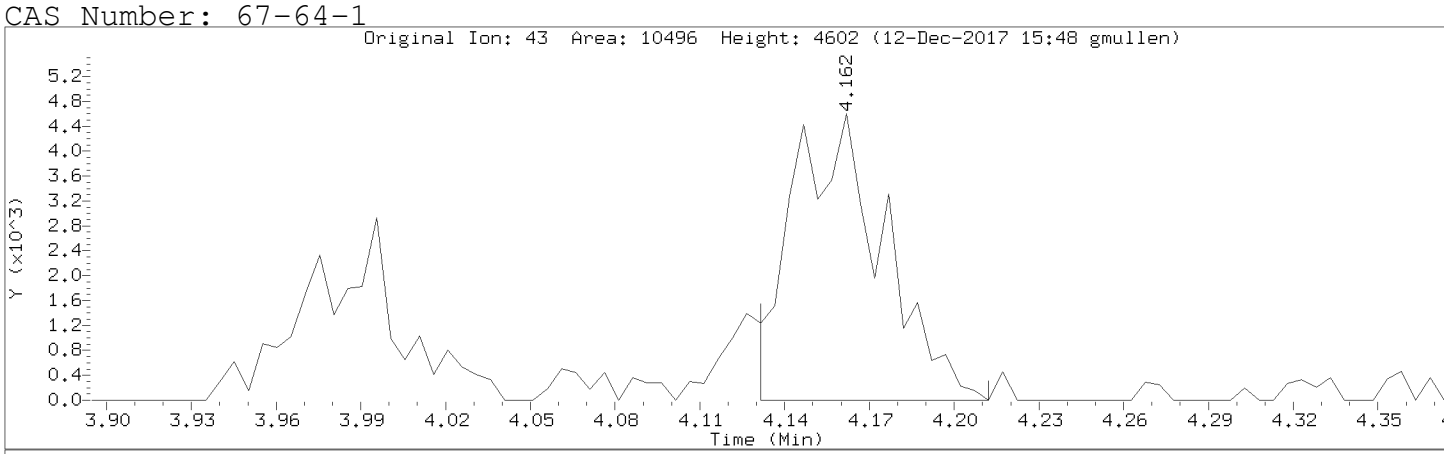
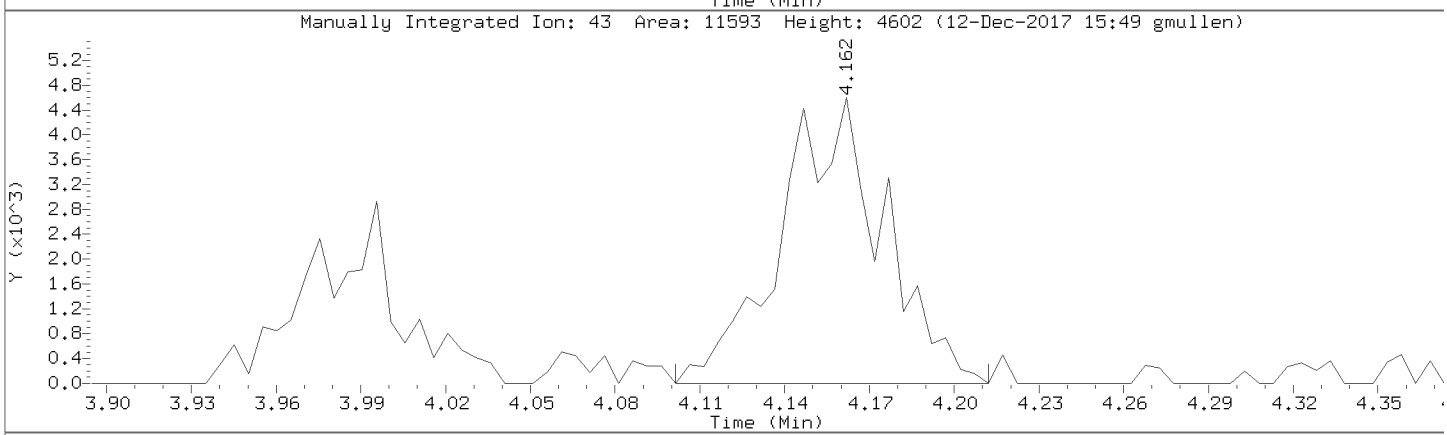
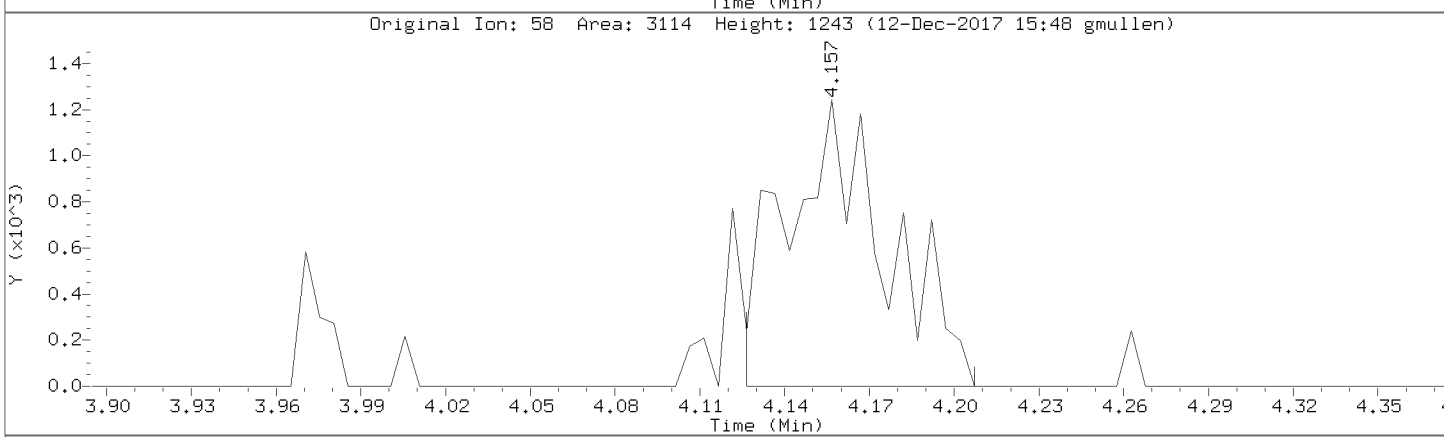
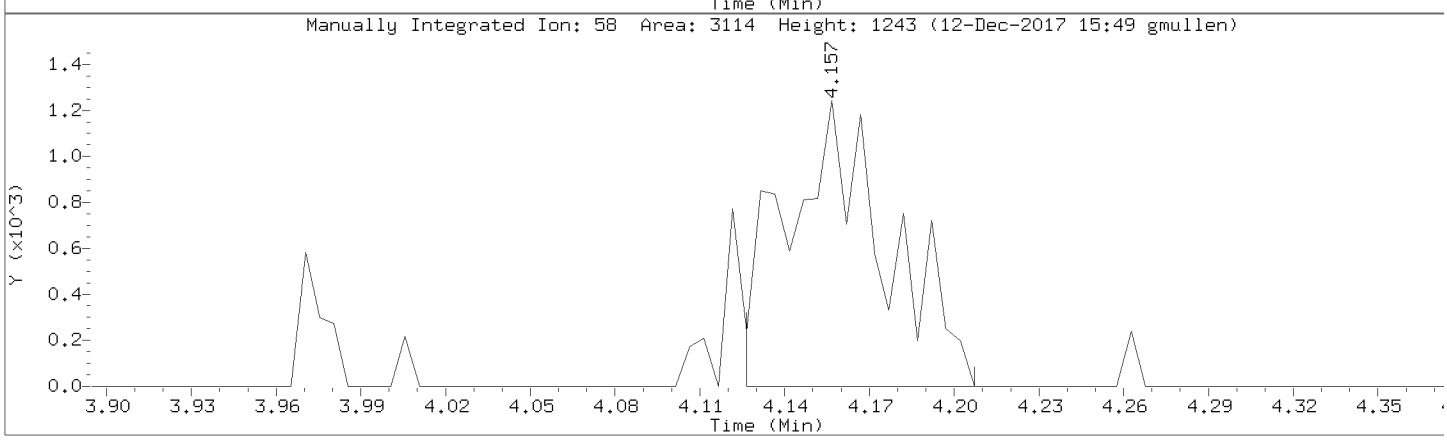
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d24.d
Injection Date: 12-DEC-2017 15:34
Instrument: 20msvd.i
Lab Sample ID: 2066645010

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









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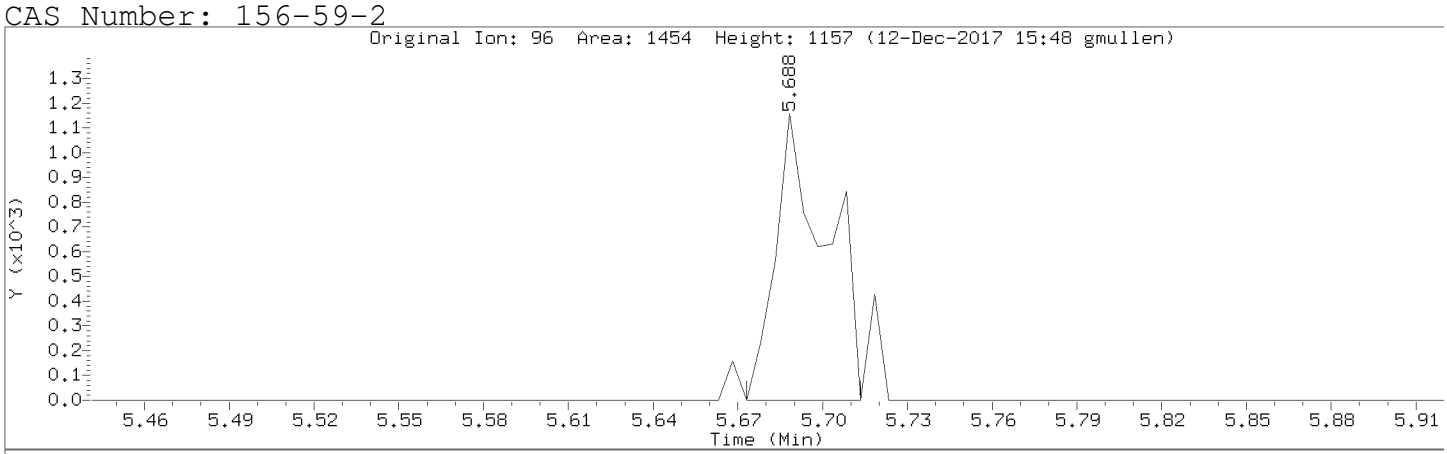
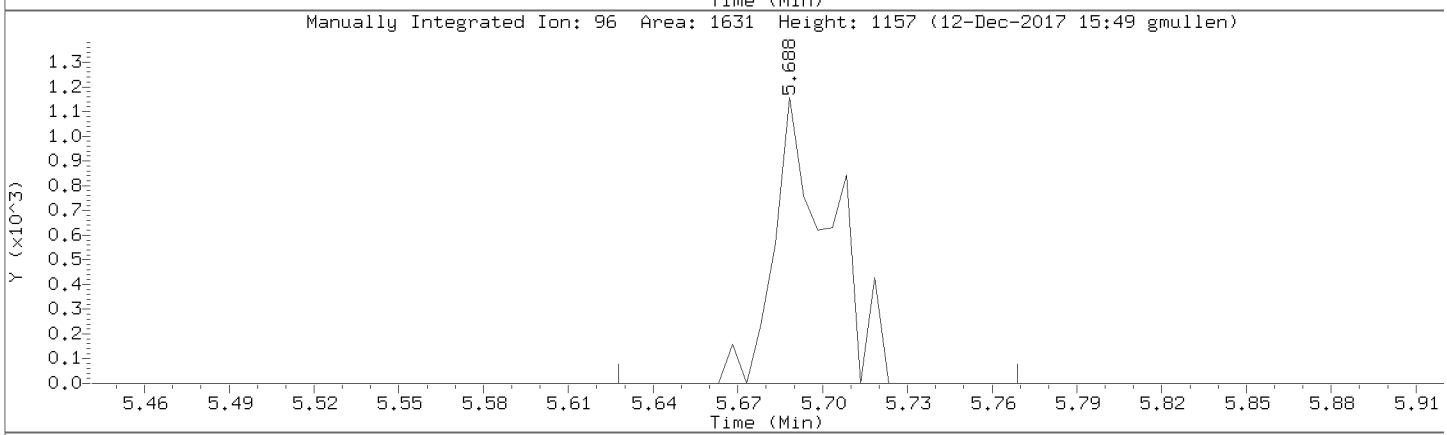
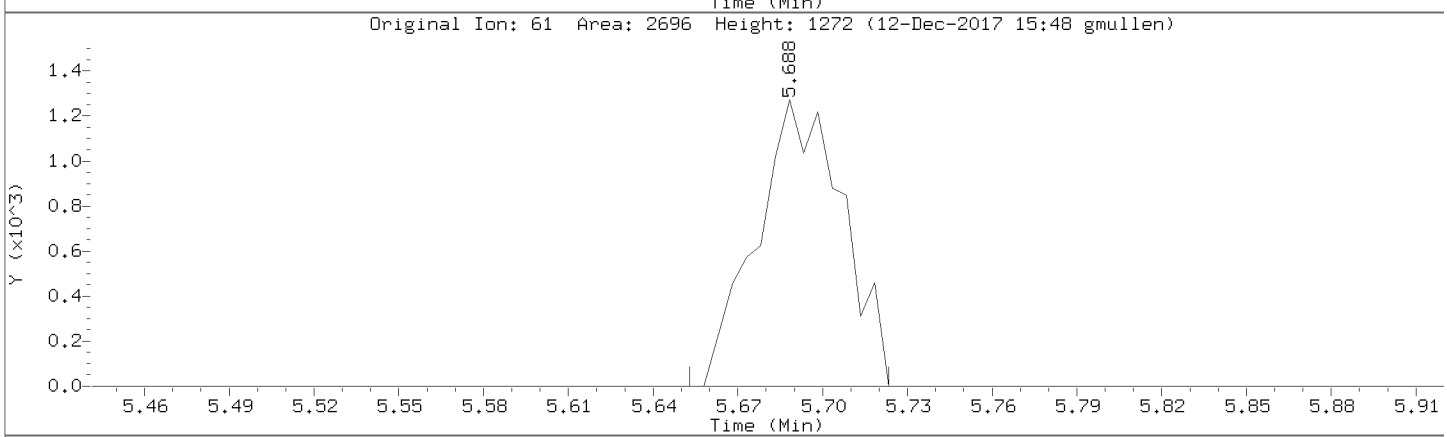
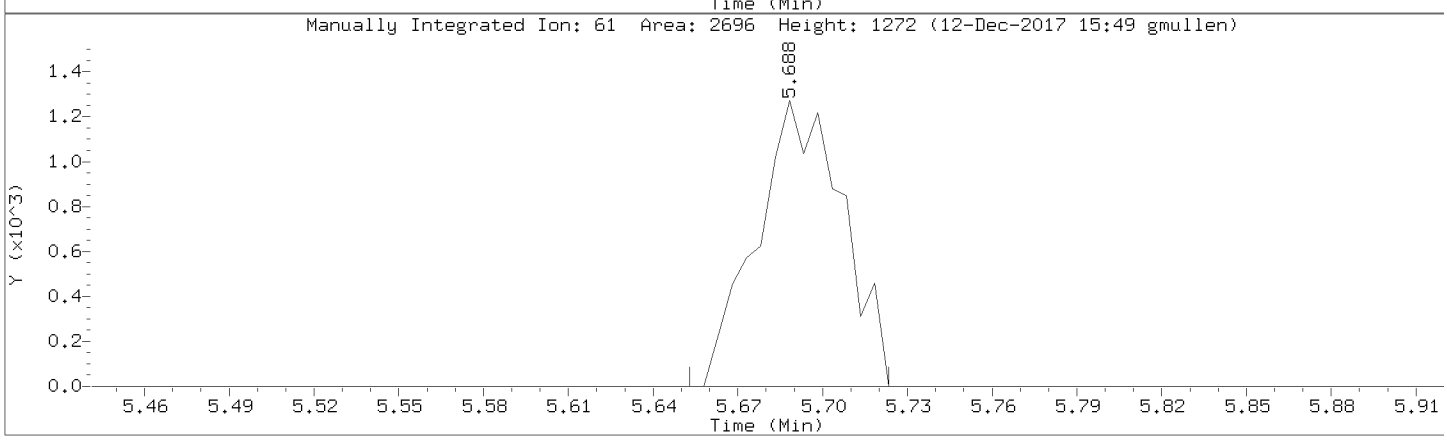
Injection Date: 12-DEC-2017 15:34
Instrument: 20msvd.i
Lab Sample ID: 2066645010

Compound: cis-1,2-Dichloroethene Review Code: LT
CAS Number: 156-59-2

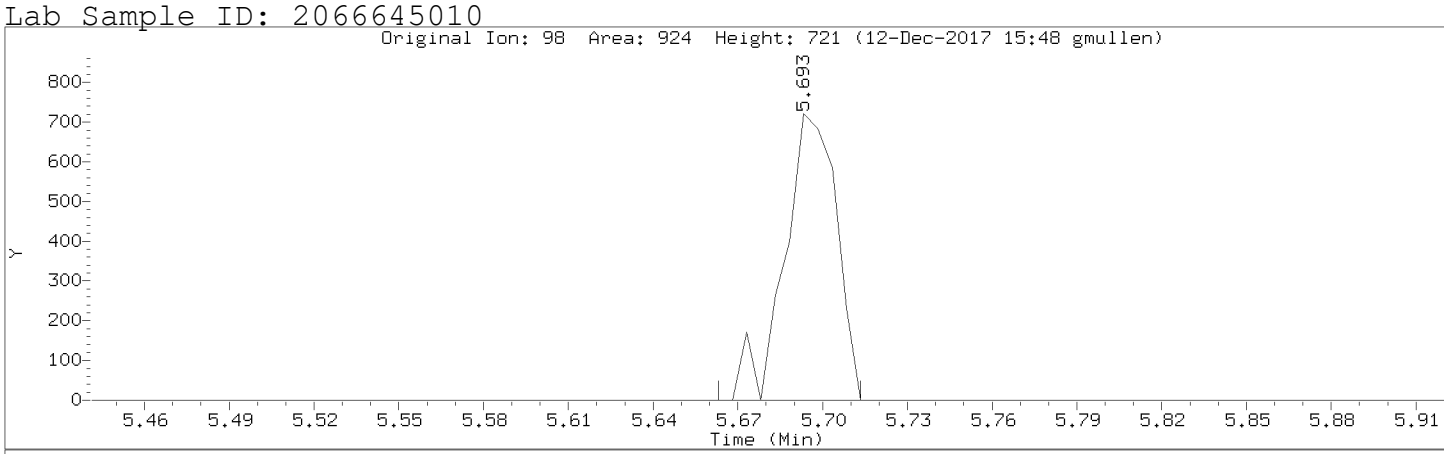


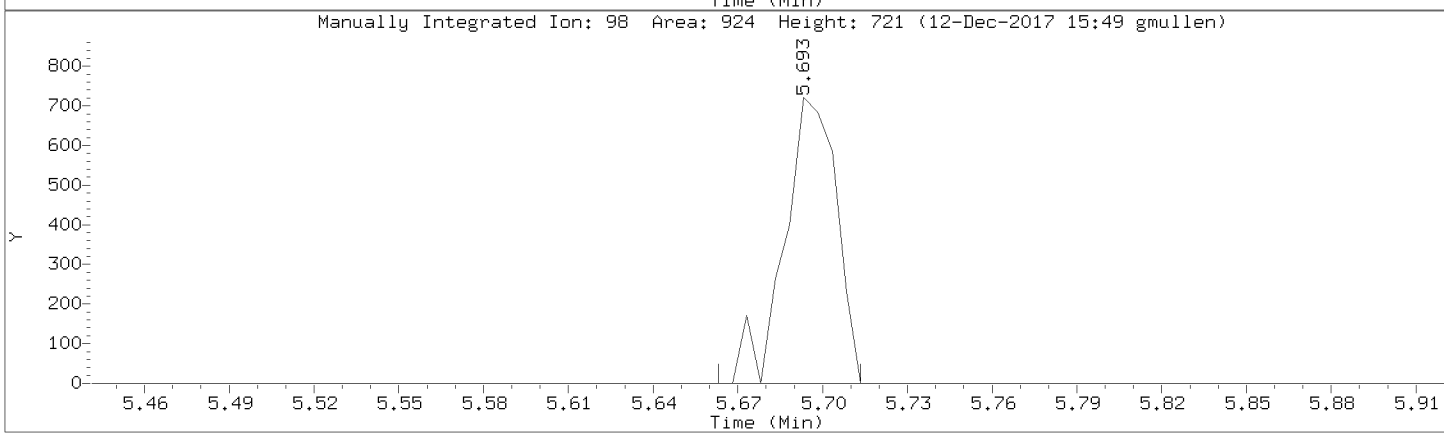






Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d24.d
Injection Date: 12-DEC-2017 15:34
Instrument: 20msvd.i
Lab Sample ID: 2066645010





SAMPLE NO.

MW-3A-4

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:52
Lab Sample ID: 2066645011
Date Analyzed: 12/12/2017 15:52
Lab File ID: 121217HA.B\1212D25.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

SAMPLE NO.

MW-3A-4

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:52
Lab Sample ID: 2066645011
Date Analyzed: 12/12/2017 15:52
Lab File ID: 121217.B\1212D25.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.9	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-3A-4

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 15:52
Lab Sample ID: 2066645011
Date Analyzed: 12/12/2017 15:52
Lab File ID: 121217.B\1212D25.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d25.d
Lab Smp Id: 2066645011 Client Smp ID: MW-3A-4
Inj Date : 12-DEC-2017 15:52
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645011
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	269244	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	877114	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	374689	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	369472	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d25.d
Lab Smp Id: 2066645011 Client Smp ID: MW-3A-4
Inj Date : 12-DEC-2017 15:52
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645011
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.151	4.146	(0.624)	6597	4.85651	4.86	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	299462	50.5212	50.5	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	269244	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	875982	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	965547	49.2631	49.3	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	374689	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.589	10.584	(0.943)	376667	51.5529	51.6	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

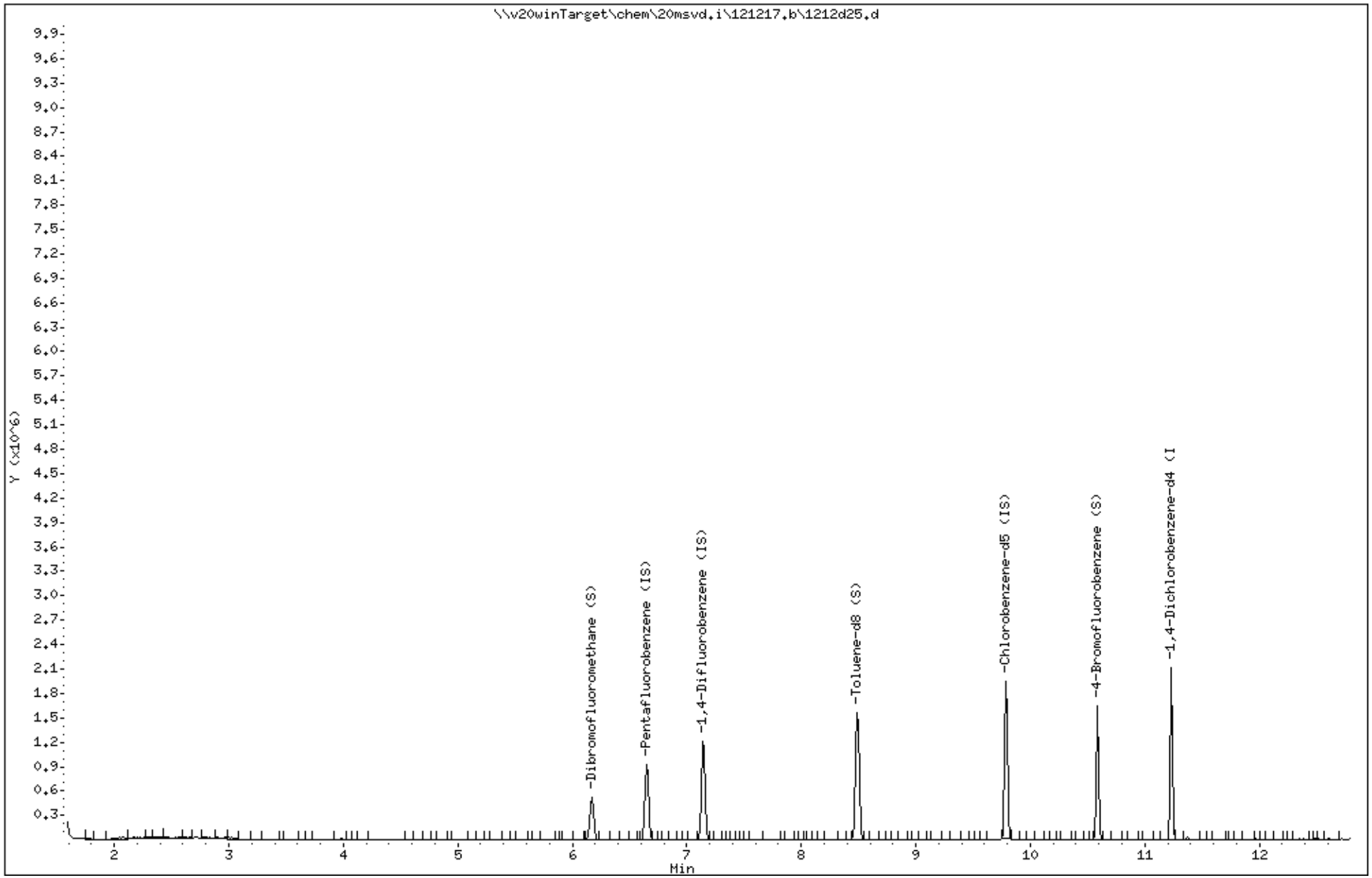
Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	369472	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d25.d
Date : 12-DEC-2017 15:52
Client ID: MW-3A-4
Sample Info: 2066645011
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d25.d

Date : 12-DEC-2017 15:52

Client ID: MW-3A-4

Instrument: 20msvd.i

Sample Info: 2066645011

Purge Volume: 5.0

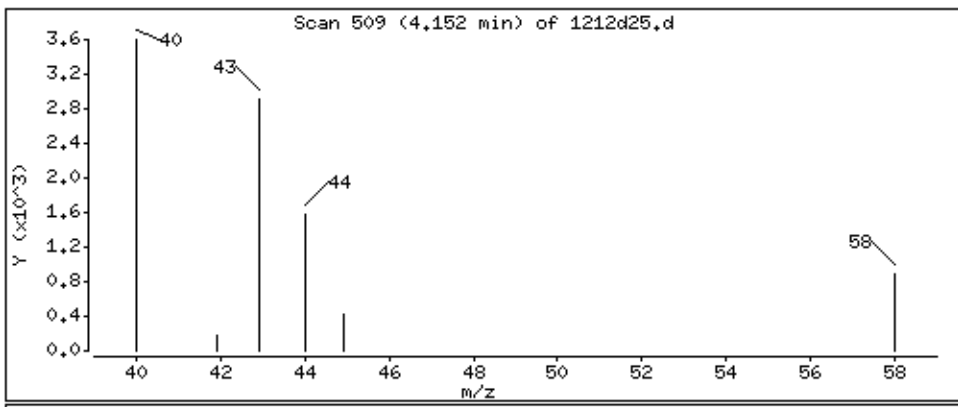
Operator: GEM

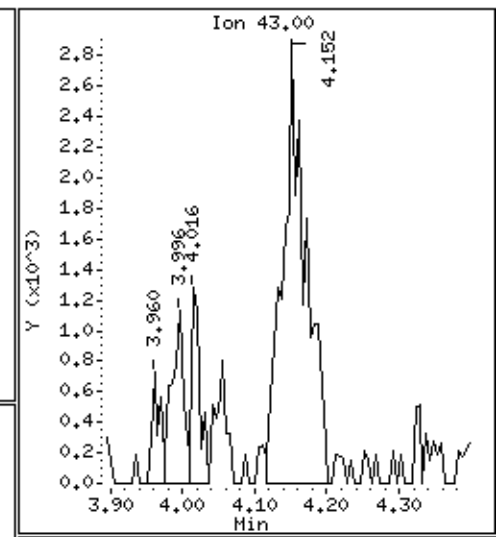
Column phase: RTX VMS 30m

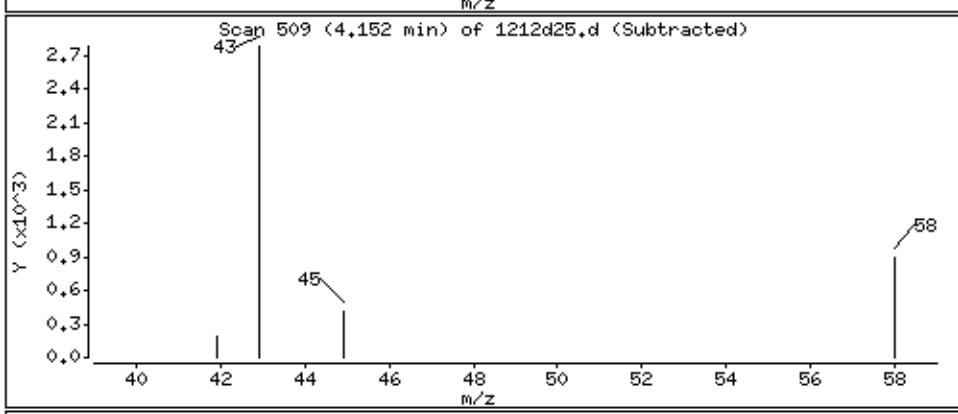
Column diameter: 0.25

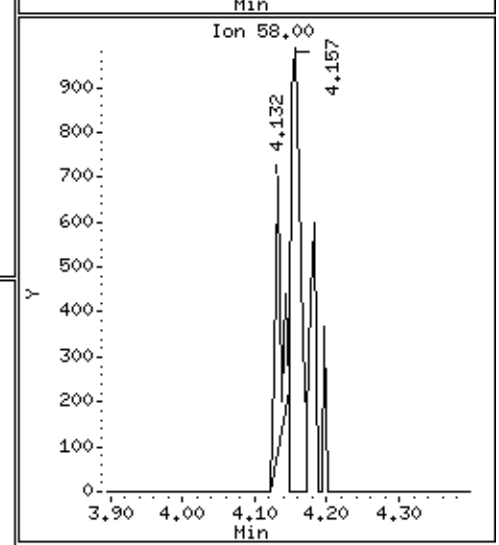
14 Acetone

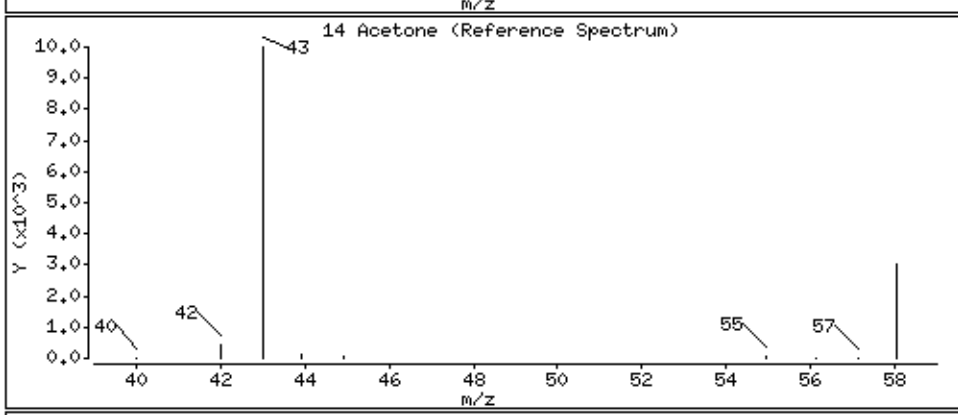
Concentration: 4.86 ug/L

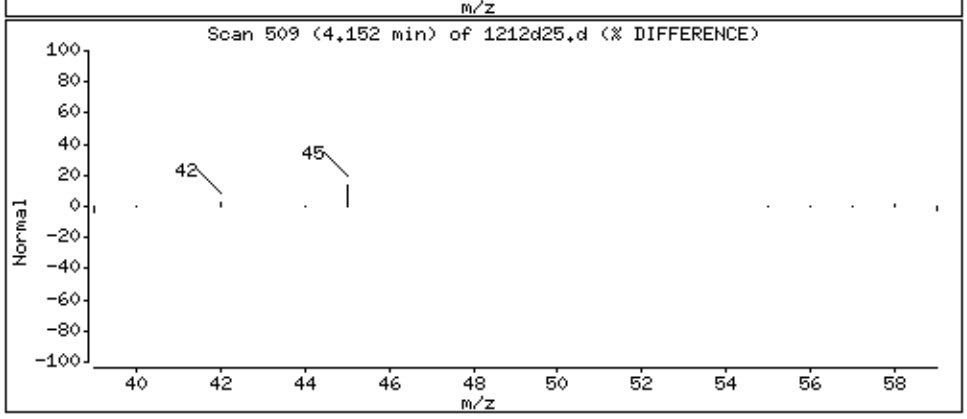








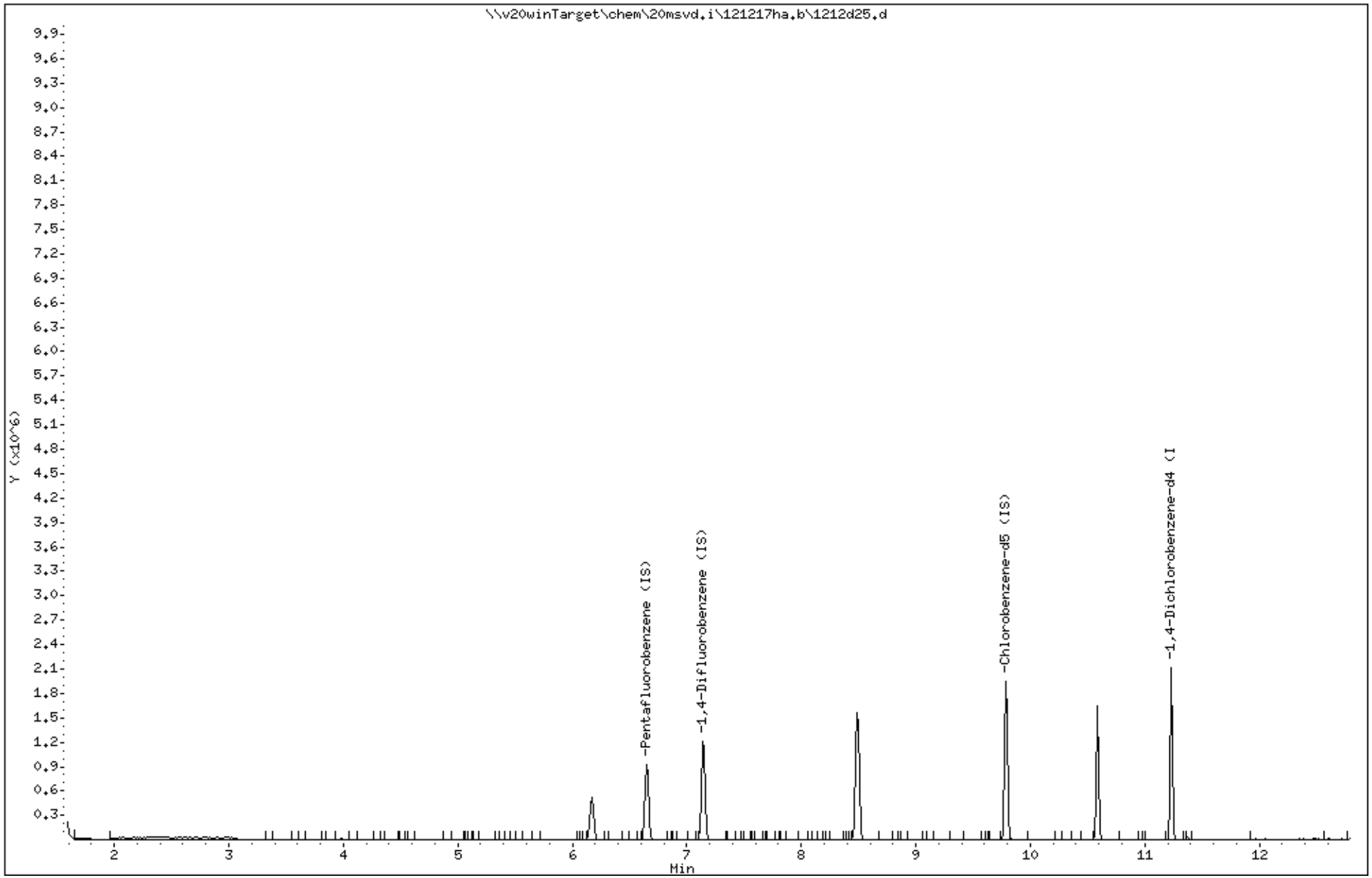




Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d25.d
Injection Date: 12-DEC-2017 15:52
Instrument: 20msvd.i
Lab Sample ID: 2066645011
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d25.d
Date : 12-DEC-2017 15:52
Client ID: MW-3A-4
Sample Info: 2066645011
Purge Volume: 5.0
Column phase: DB-624

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d25.d
Injection Date: 12-DEC-2017 15:52
Instrument: 20msvd.i
Lab Sample ID: 2066645011
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

EB-20171206

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:09
Lab Sample ID: 2066645012
Date Analyzed: 12/12/2017 16:09
Lab File ID: 121217.B\1212D26.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	8.3	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

EB-20171206

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:09
Lab Sample ID: 2066645012
Date Analyzed: 12/12/2017 16:09
Lab File ID: 121217.B\1212D26.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

EB-20171206

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:09
Lab Sample ID: 2066645012
Date Analyzed: 12/12/2017 16:09
Lab File ID: 121217HA.B\1212D26.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d26.d
Lab Smp Id: 2066645012 Client Smp ID: EB-20171206
Inj Date : 12-DEC-2017 16:09
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645012
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.645	6.645	(1.000)	265639	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	857100	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	362638	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	354022	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d26.d
Lab Smp Id: 2066645012 Client Smp ID: EB-20171206
Inj Date : 12-DEC-2017 16:09
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645012
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	4.045	4.045	(0.609)	4264	0.92274	0.923	
14 Acetone	43	4.151	4.146	(0.625)	11011	8.28113	8.28	(M)
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.929)	289163	49.4457	49.4	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						(D
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						(D
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.645	6.645	(1.000)	265639	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	857100	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	948847	49.4775	49.5	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	362638	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	362400	51.7648	51.8	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

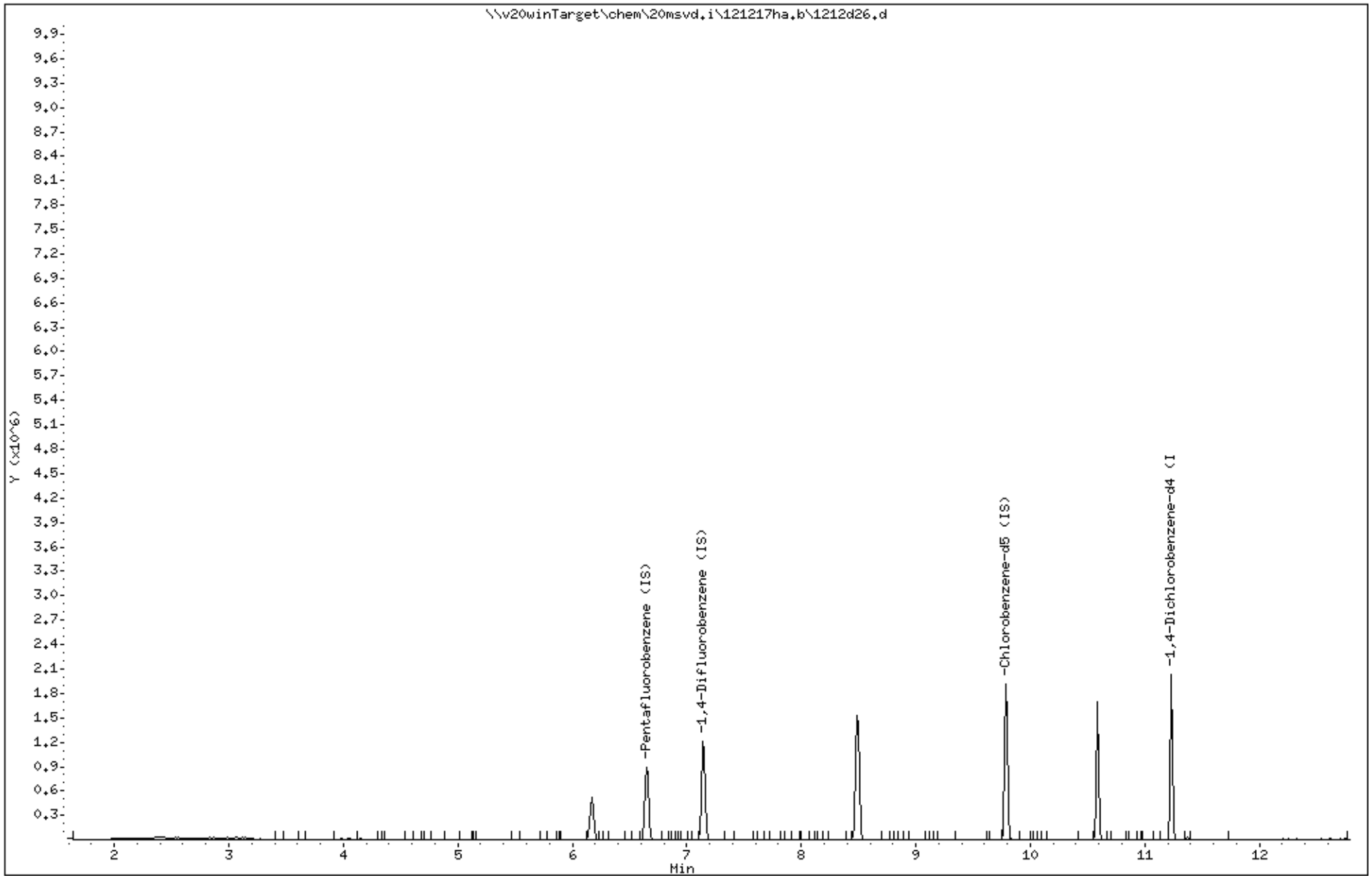
	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
77	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78	1,2,3-Trichloropropane	110	Compound Not Detected.						
79	4-Chlorotoluene	91	Compound Not Detected.						
80	tert-Butylbenzene	91	Compound Not Detected.						
81	Pentachloroethane	167	Compound Not Detected.						
82	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83	sec-Butylbenzene	105	Compound Not Detected.						
84	p-Isopropyltoluene	119	Compound Not Detected.						
85	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86	1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	354022	50.0000		
87	1,4-Dichlorobenzene	146	Compound Not Detected.						
88	n-Butylbenzene	91	Compound Not Detected.						(D
89	1,2-Dichlorobenzene	146	Compound Not Detected.						
90	1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91	Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93	Naphthalene	128	Compound Not Detected.						
94	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d26.d
Date : 12-DEC-2017 16:09
Client ID: EB-20171206
Sample Info: 2066645012
Purge Volume: 5.0
Column phase: DB-624

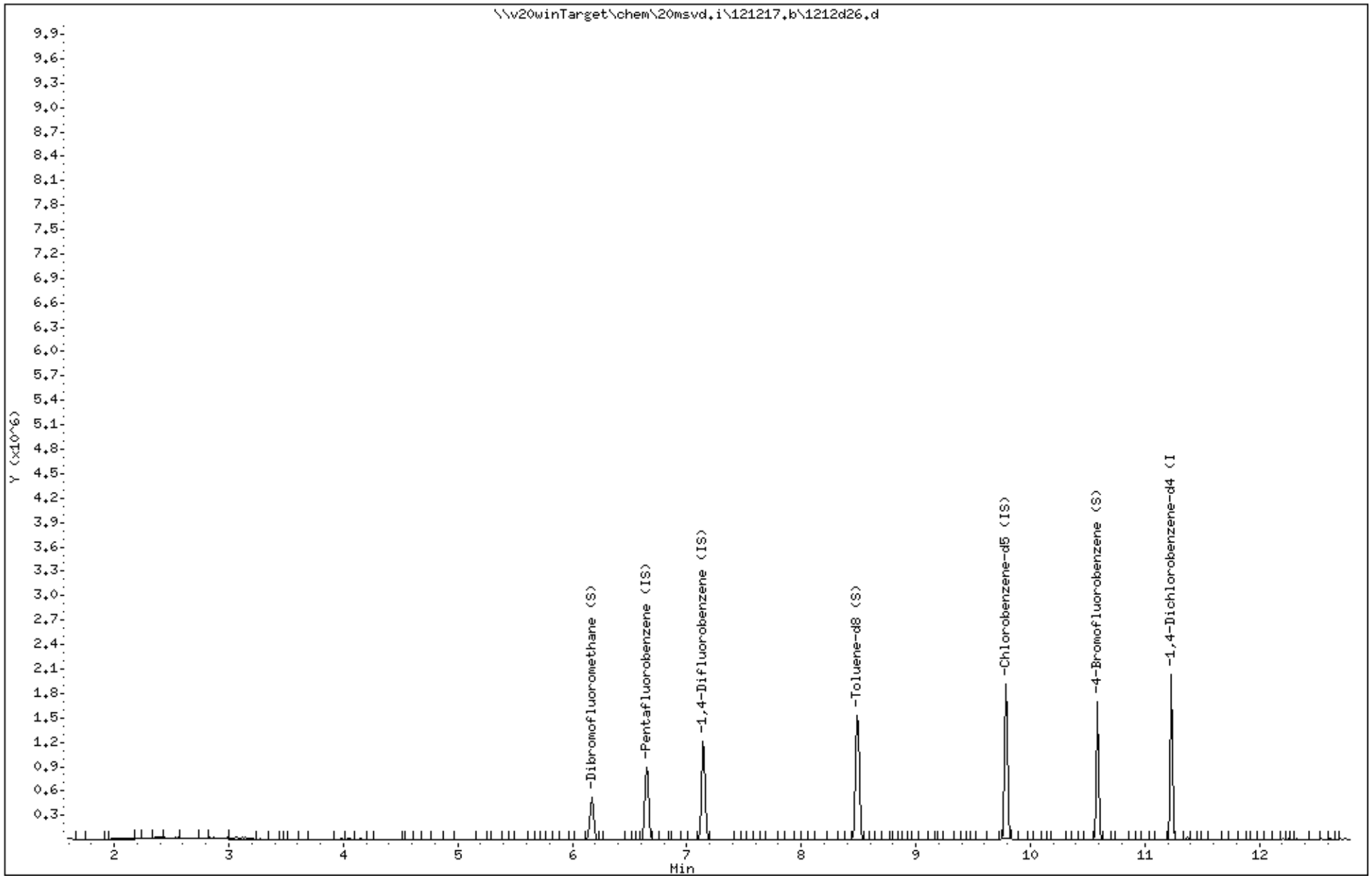
Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d26.d
Injection Date: 12-DEC-2017 16:09
Instrument: 20msvd.i
Lab Sample ID: 2066645012
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d26.d
Date : 12-DEC-2017 16:09
Client ID: EB-20171206
Sample Info: 2066645012
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d26.d

Date : 12-DEC-2017 16:09

Client ID: EB-20171206

Instrument: 20msvd.i

Sample Info: 2066645012

Purge Volume: 5.0

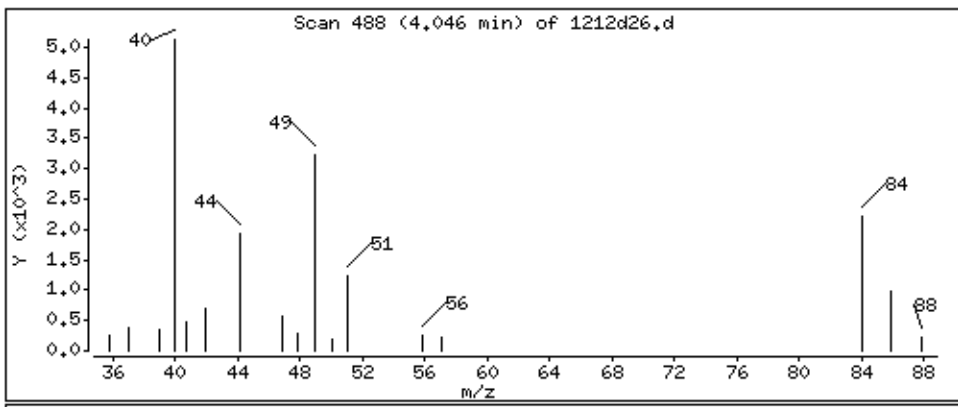
Operator: GEM

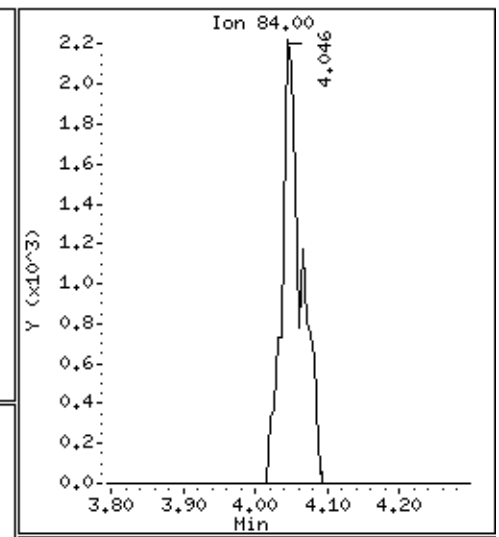
Column phase: RTX VMS 30m

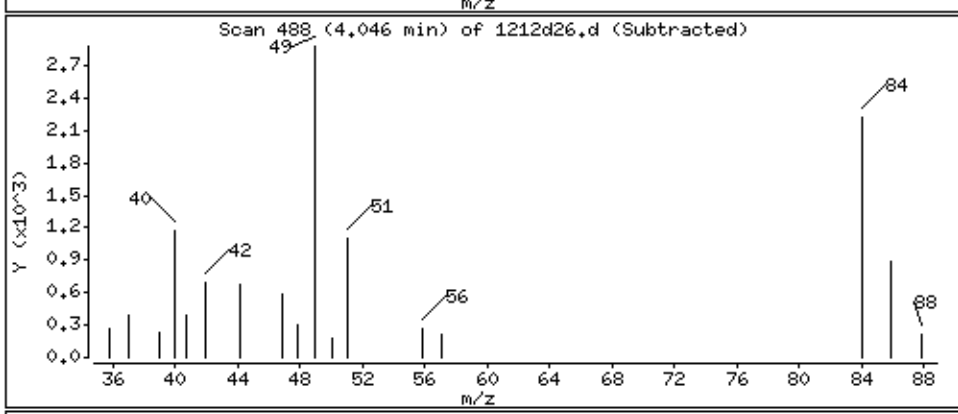
Column diameter: 0.25

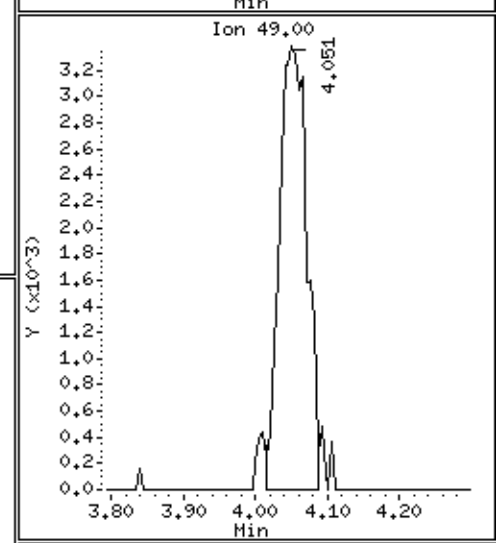
13 Methylene Chloride

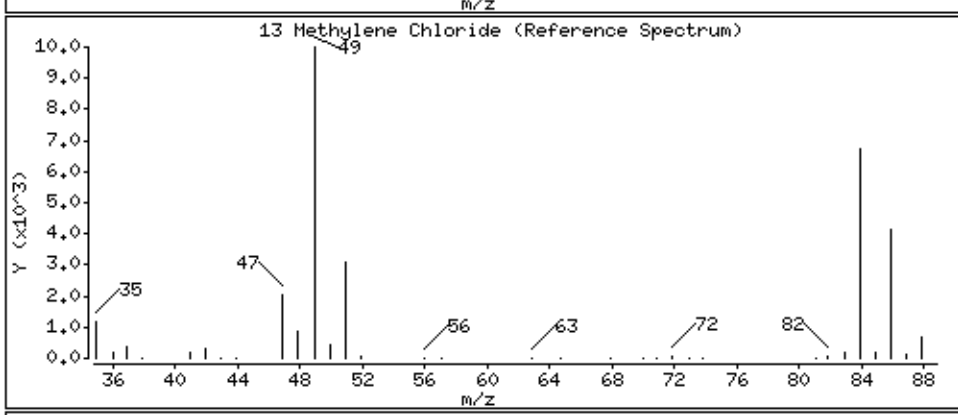
Concentration: 0.923 ug/L

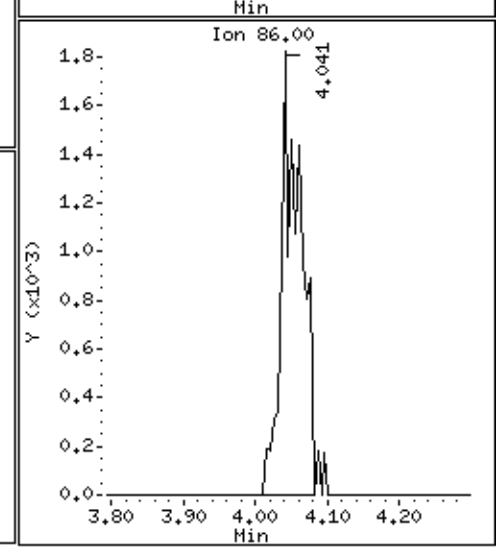


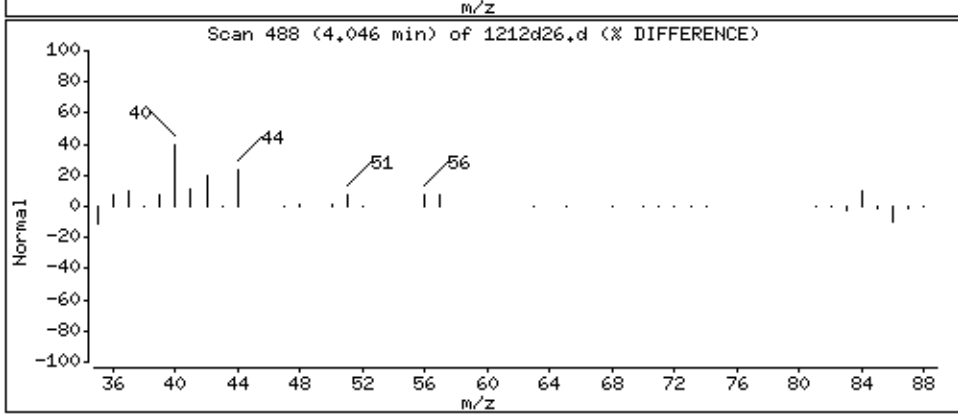












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d26.d

Date : 12-DEC-2017 16:09

Client ID: EB-20171206

Instrument: 20msvd.i

Sample Info: 2066645012

Purge Volume: 5.0

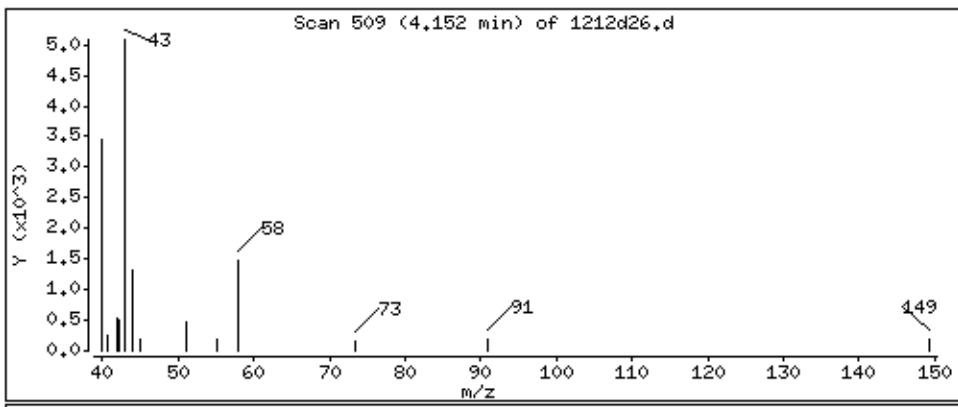
Operator: GEM

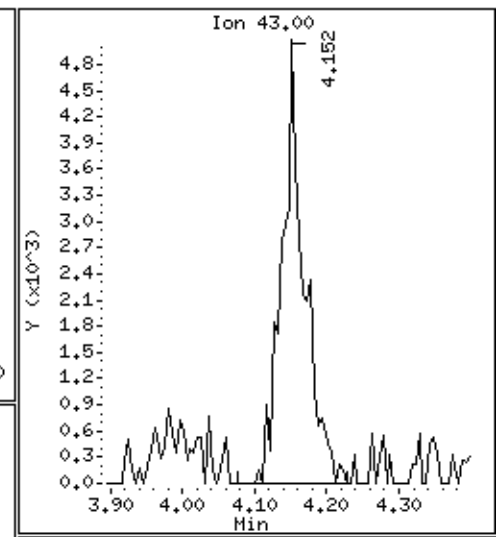
Column phase: RTX VMS 30m

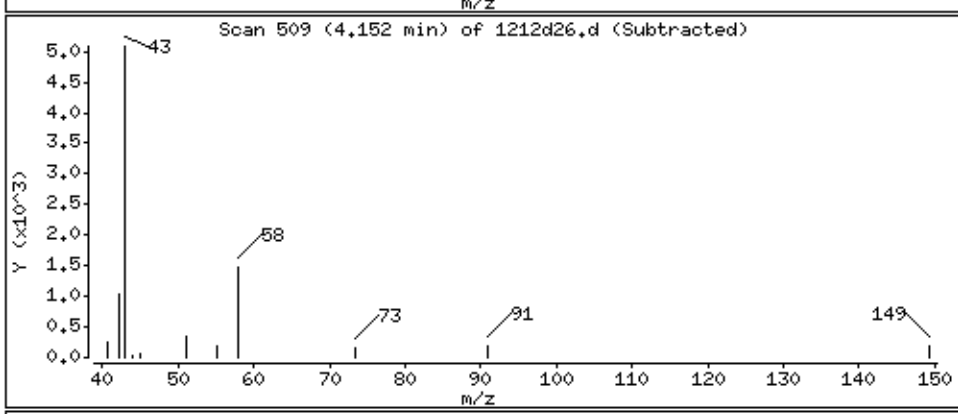
Column diameter: 0.25

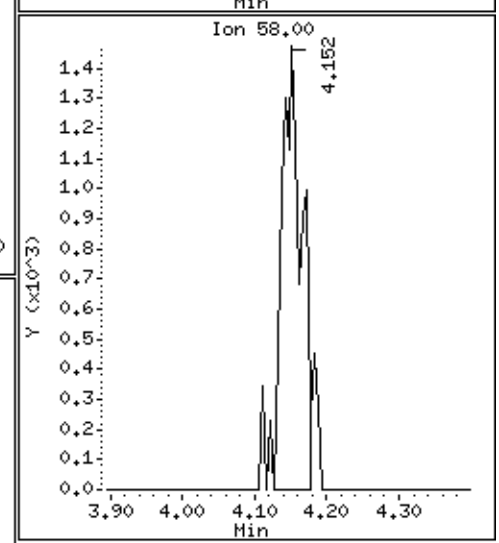
14 Acetone

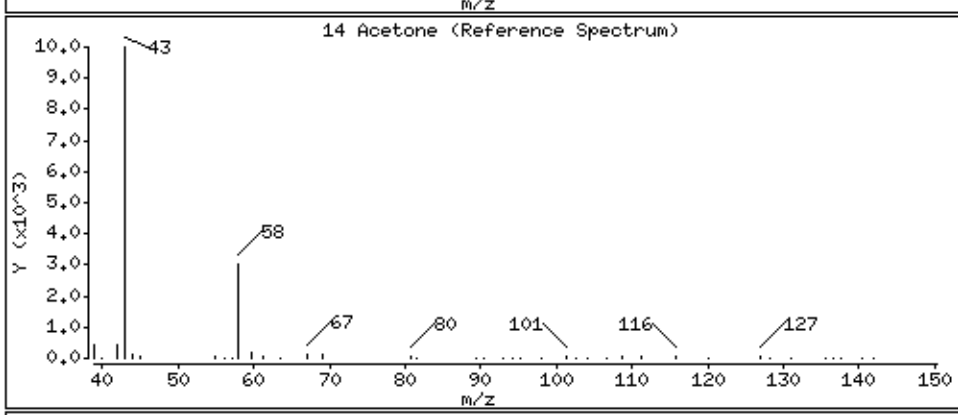
Concentration: 8.28 ug/L

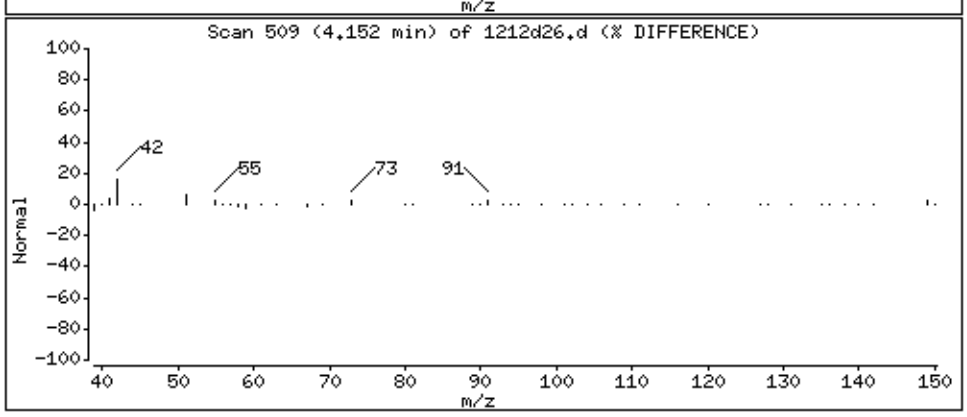






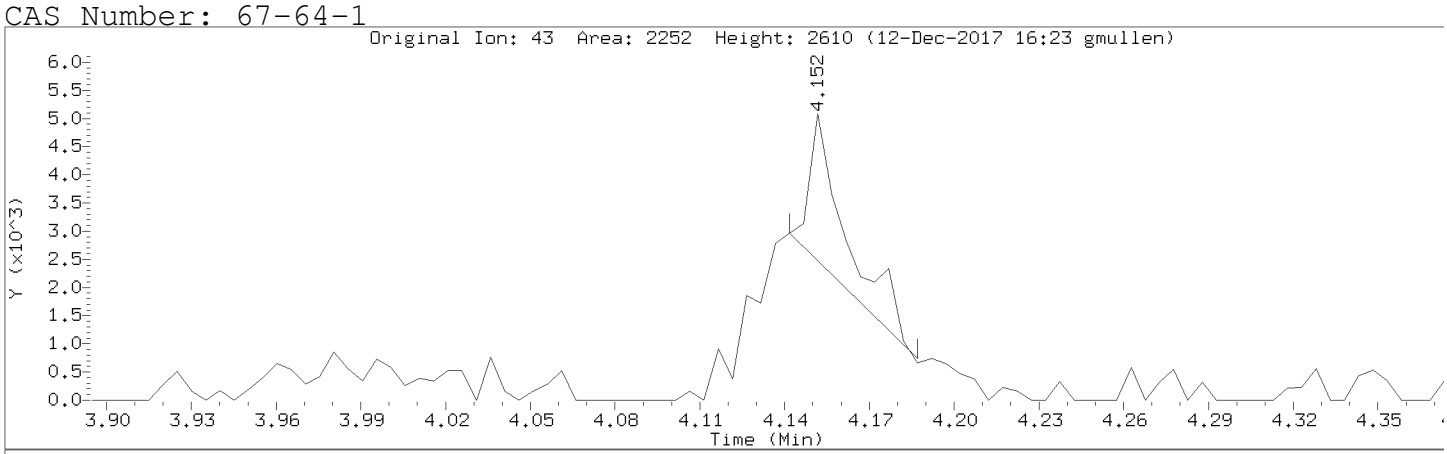


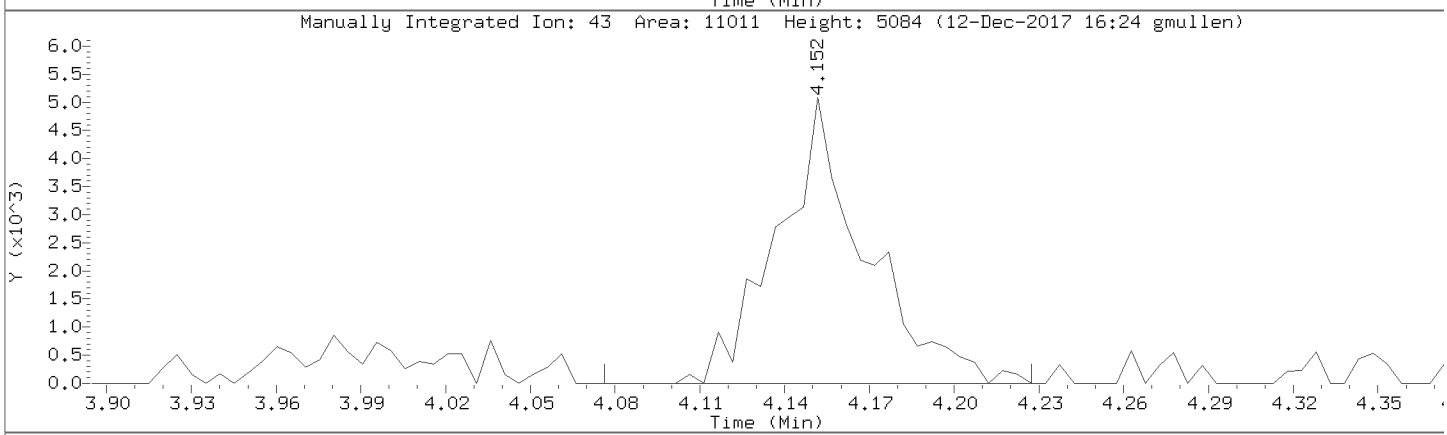


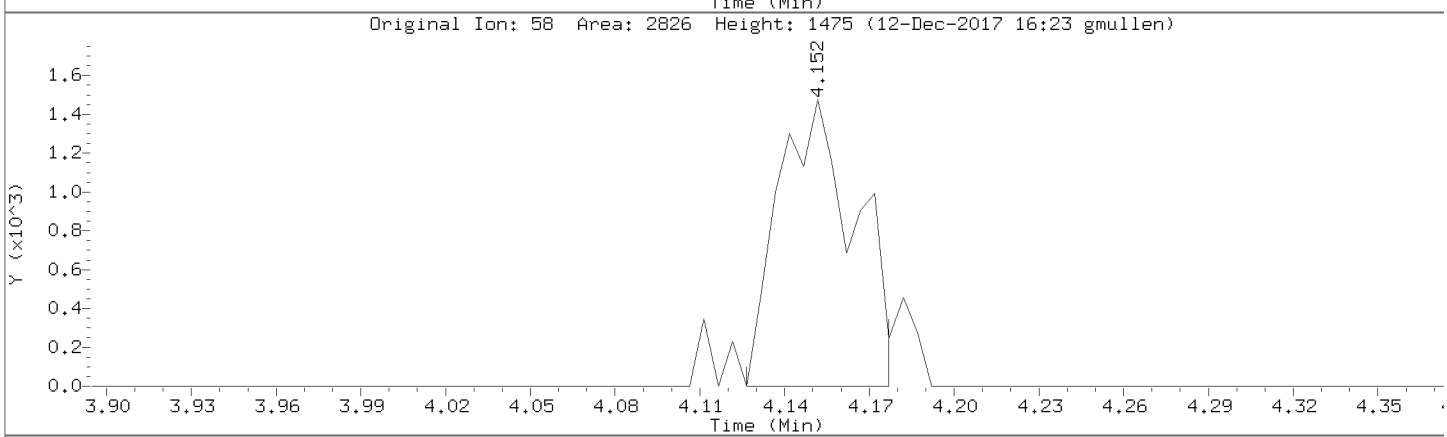


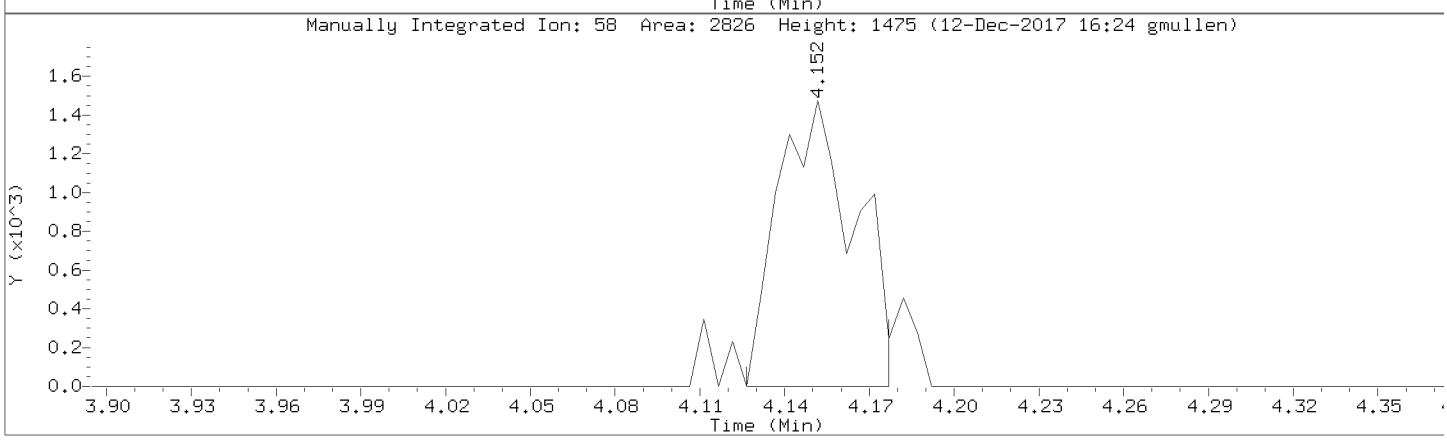
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d26.d
Injection Date: 12-DEC-2017 16:09
Instrument: 20msvd.i
Lab Sample ID: 2066645012

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









SAMPLE NO.

MW-1D-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:27
Lab Sample ID: 2066645013
Date Analyzed: 12/12/2017 16:27
Lab File ID: 121217.B\1212D27.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	5.9	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	1.2	
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	3.7	
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-1D-3

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:27
Lab Sample ID: 2066645013
Date Analyzed: 12/12/2017 16:27
Lab File ID: 121217.B\1212D27.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

SAMPLE NO.

MW-1D-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:27
Lab Sample ID: 2066645013
Date Analyzed: 12/12/2017 16:27
Lab File ID: 121217HA.B\1212D27.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	25.6	
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	29.7	
76-38-0	Methoxyflurane	ND	U
	Total Haloether	55.2	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d27.d
Lab Smp Id: 2066645013 Client Smp ID: MW-1D-3
Inj Date : 12-DEC-2017 16:27
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645013
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.151	4.146	(0.624)	7680	5.93311	5.93	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	5.688	5.693	(0.855)	2878	0.51951	0.520	
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	278376	49.1140	49.1	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	6.559	6.559	(0.918)	22420	1.17514	1.18	
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	257457	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						(D
	42 Trichloroethene	130	7.103	7.108	(0.994)	3428	0.59197	0.592	
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	841447	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	933165	49.5650	49.6	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	8.907	8.897	(0.910)	17405	3.71170	3.71	
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						
*	62 Chlorobenzene-d5 (IS)	82	9.783	9.788	(1.000)	353580	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.943)	344583	51.7727	51.8	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	336566	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d27.d
Lab Smp Id: 2066645013 Client Smp ID: MW-1D-3
Inj Date : 12-DEC-2017 16:27
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645013
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

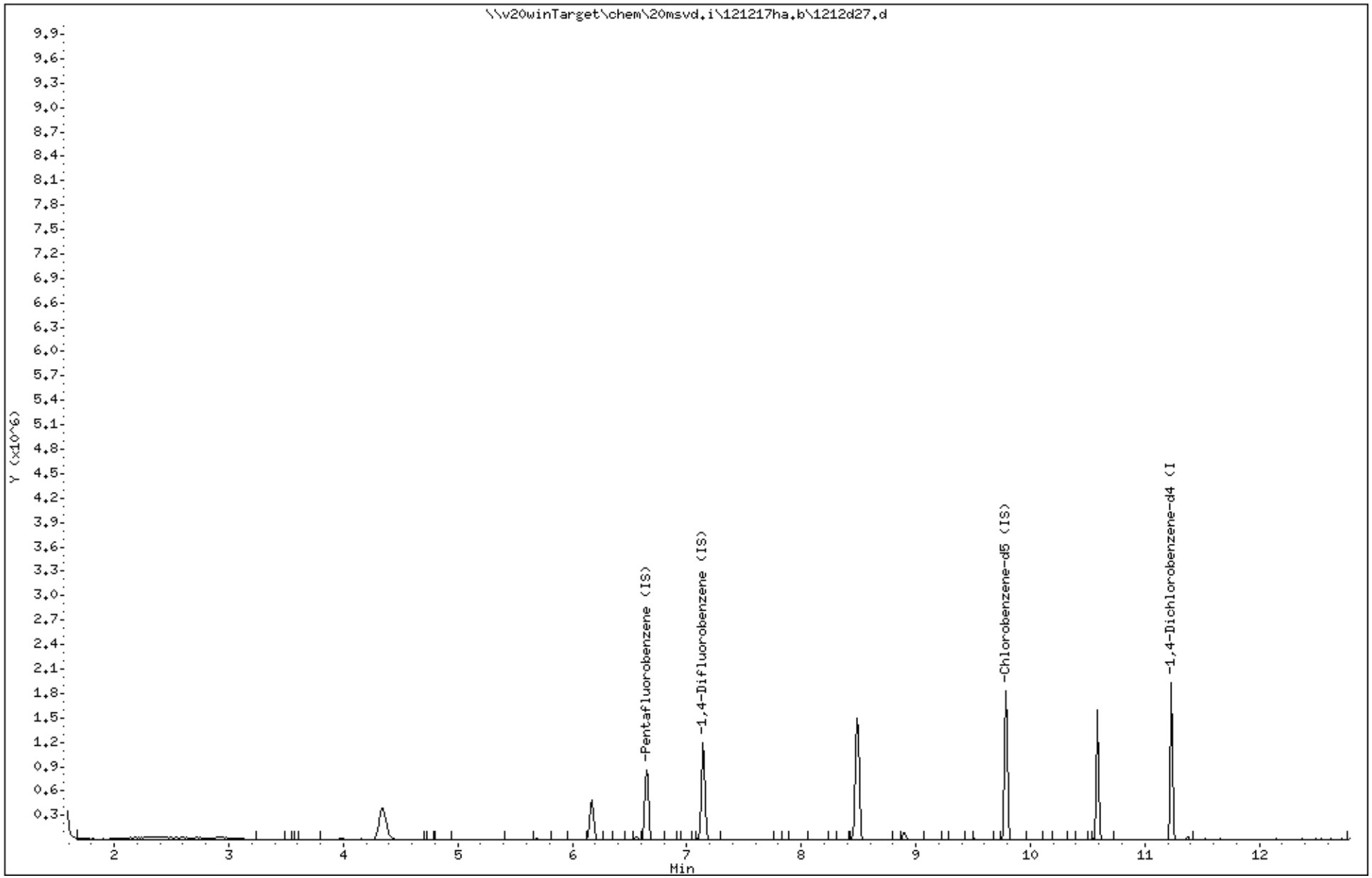
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Haloether 229	83	2.242	2.237	(0.337)	2305	0.56438	0.564(M)	
2 Haloether 406	85	Compound Not Detected.						
3 Isoflurane	117	4.338	4.333	(0.652)	68342	29.6502	29.6(M)	
4 Haloether 508	97	4.343	4.358	(0.653)	54397	25.5882	25.6	
5 Enflurane	117	Compound Not Detected.						(D)
6 Halomar	81	Compound Not Detected.						
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	257457	50.0000		
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	841447	50.0000		
7 Haloether 421	67	Compound Not Detected.						
8 Haloether 427	151	Compound Not Detected.						
11 Haloether 428	117	Compound Not Detected.						
12 Methoxyflurane	81	Compound Not Detected.						
13 Haloether 528	211	9.506	9.511	(1.331)	4985	0.39027	0.390	
* 14 Chlorobenzene-d5 (IS)	82	9.783	9.788	(1.000)	353676	50.0000		
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.229	11.234	(1.000)	336566	50.0000		

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d27.d
Date : 12-DEC-2017 16:27
Client ID: MW-1D-3
Sample Info: 2066645013
Purge Volume: 5.0
Column phase: DB-624

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.18



Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

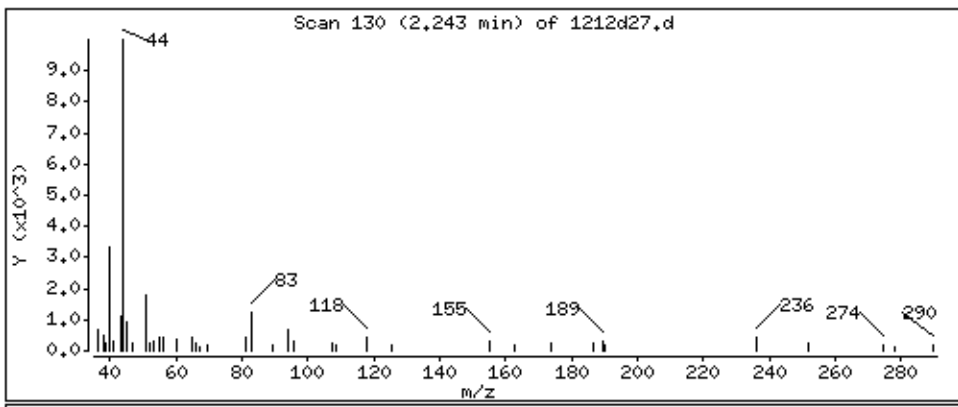
Operator: GEM

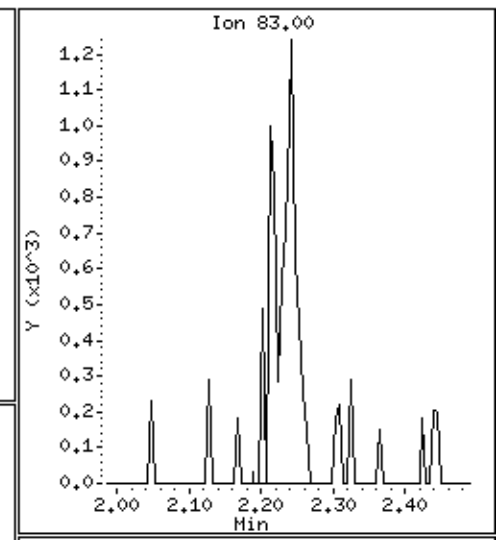
Column phase: DB-624

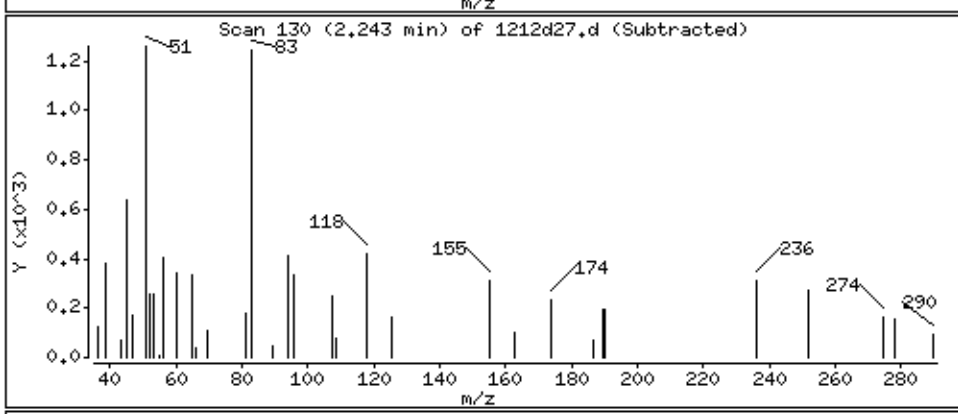
Column diameter: 0.18

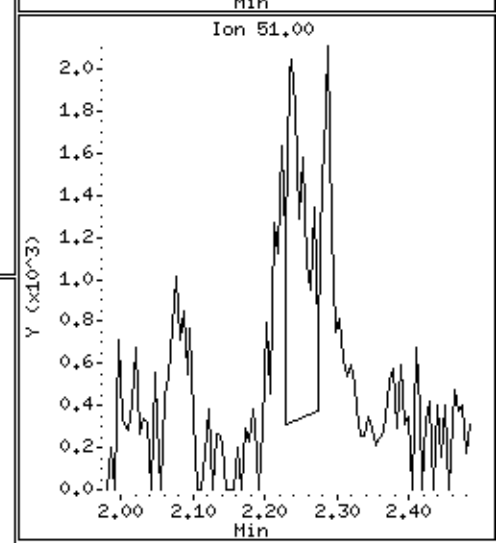
1 Haloether 229

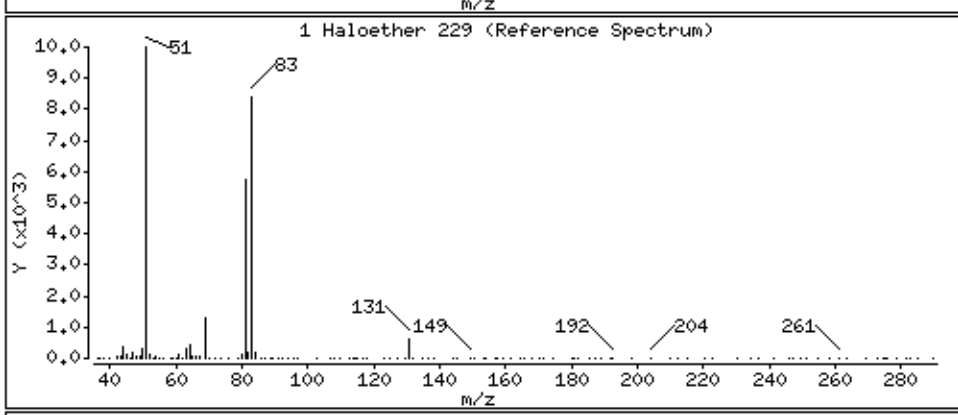
Concentration: 0.564 ug/L

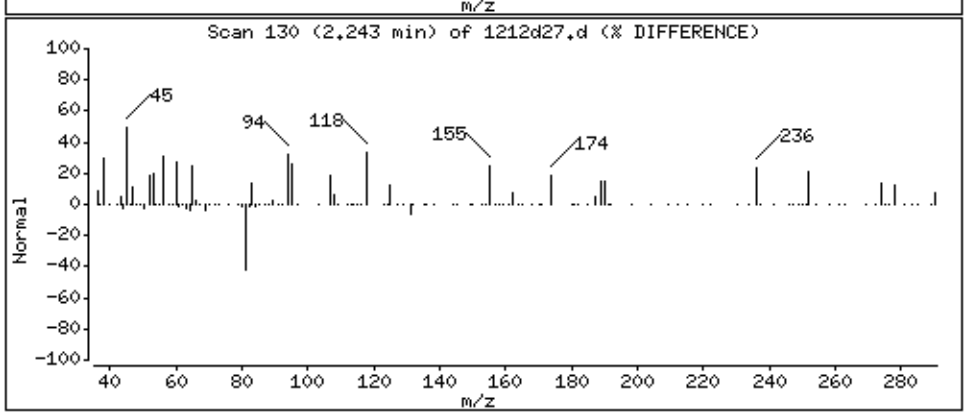












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

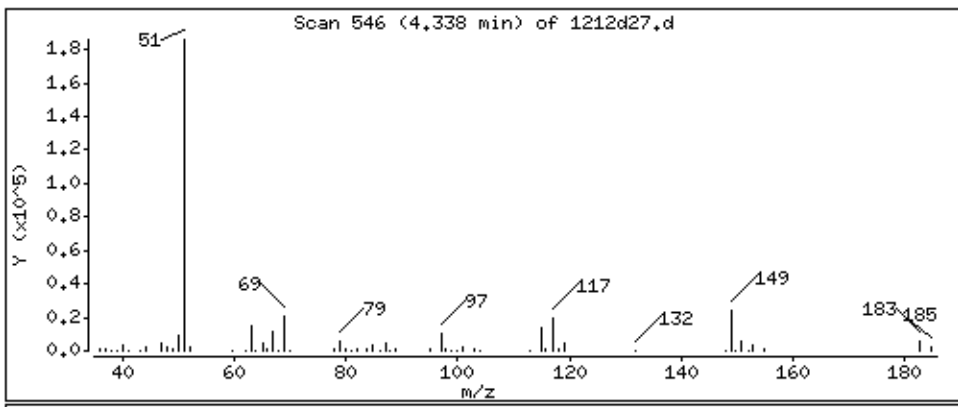
Operator: GEM

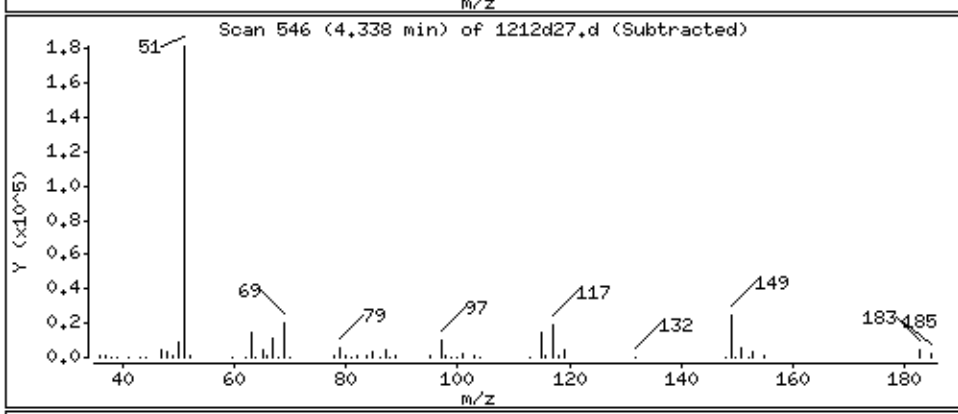
Column phase: DB-624

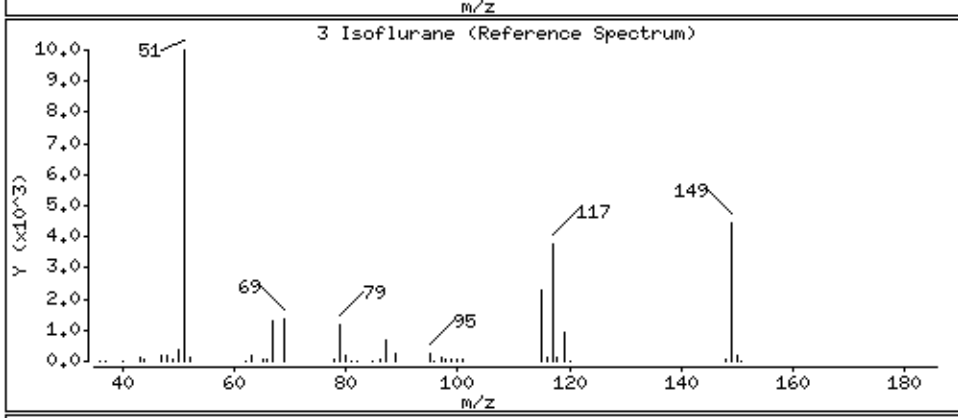
Column diameter: 0.18

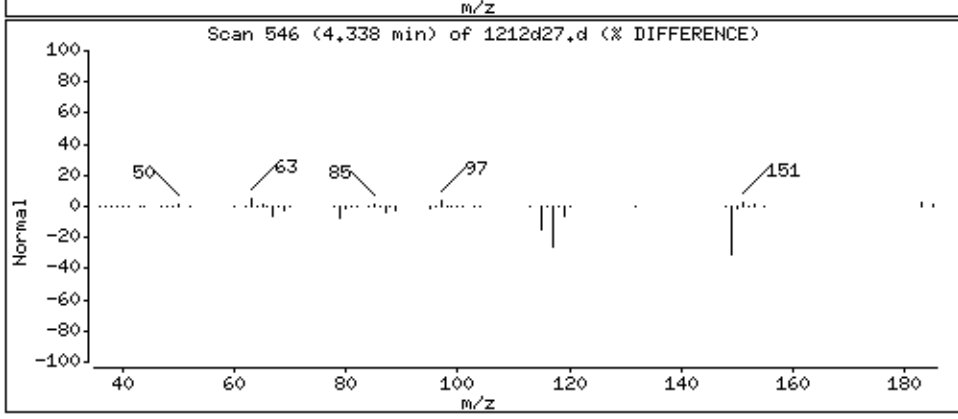
3 Isoflurane

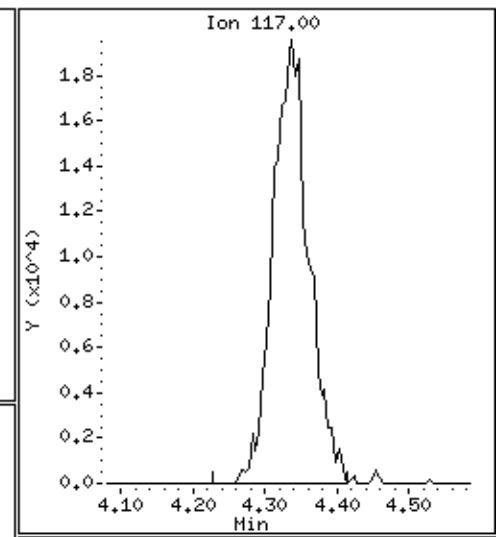
Concentration: 29.6 ug/L

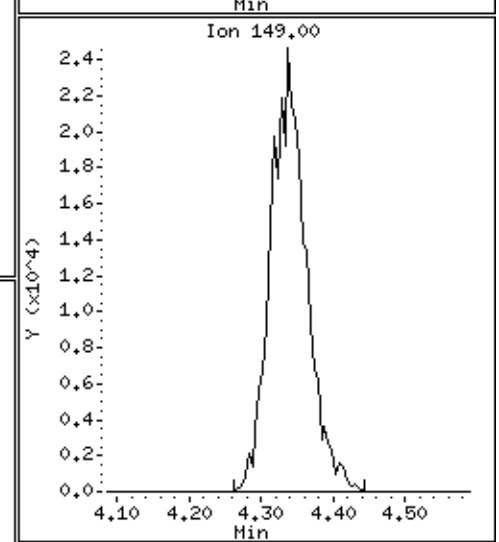


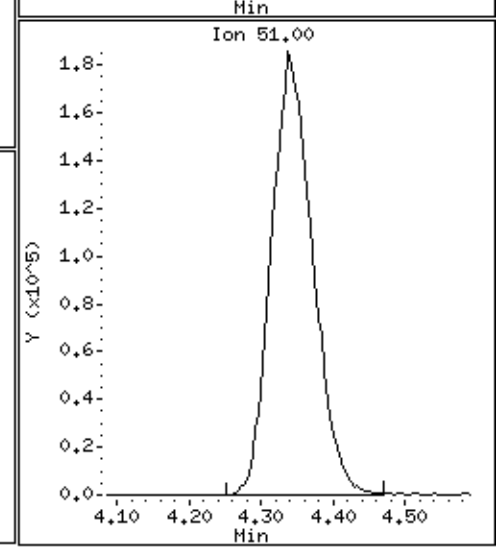












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

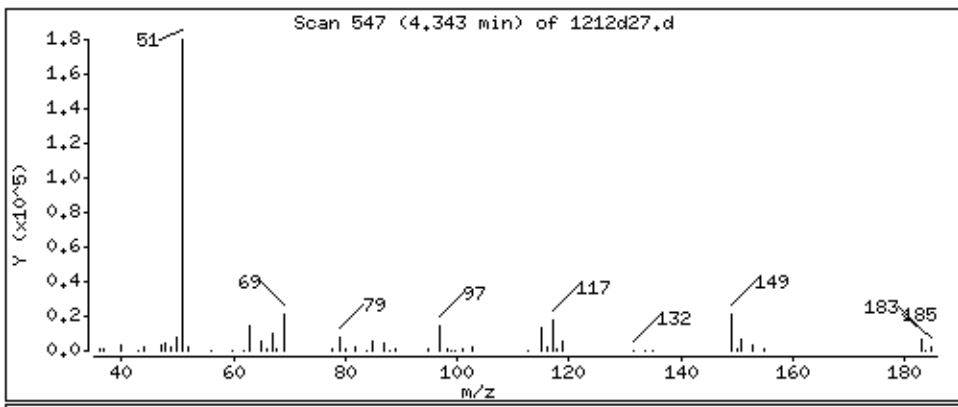
Operator: GEM

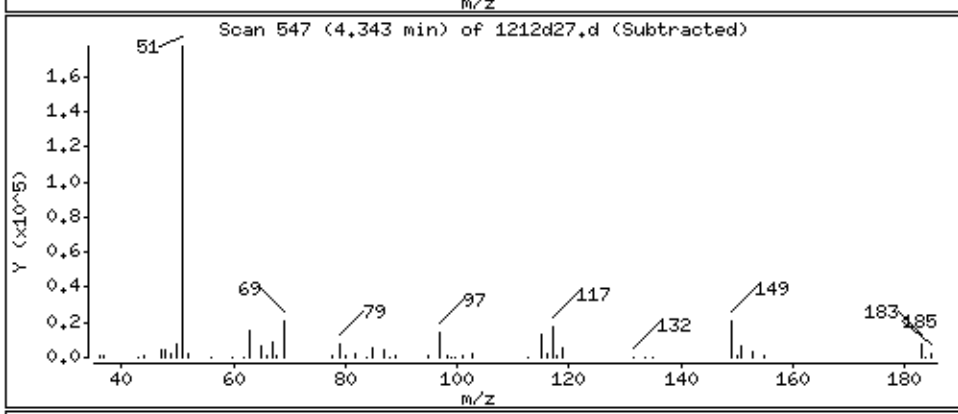
Column phase: DB-624

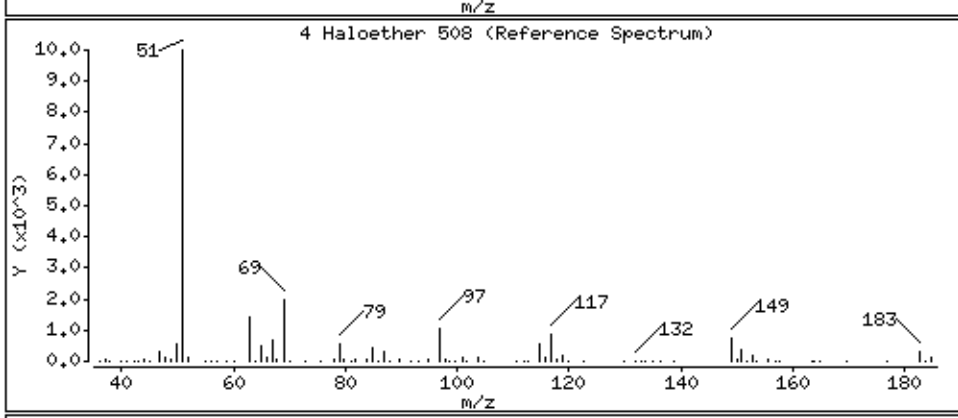
Column diameter: 0.18

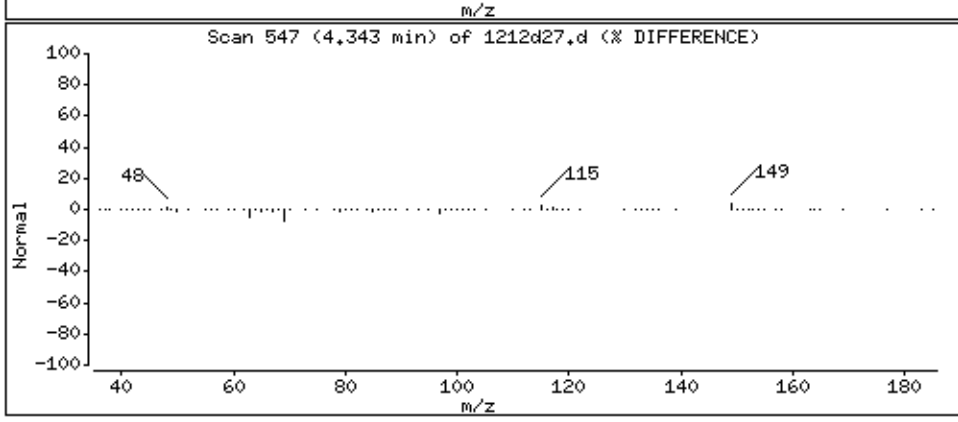
4 Haloether 508

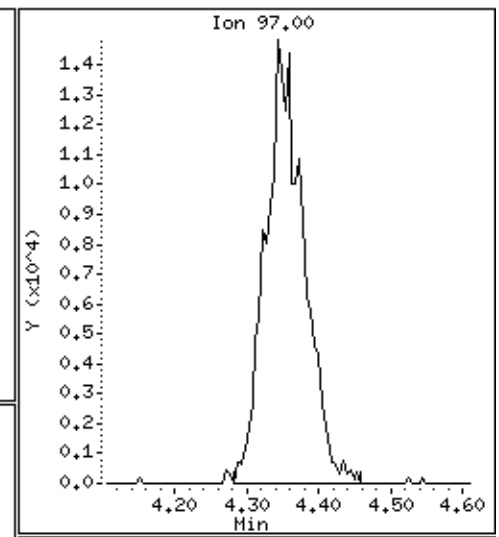
Concentration: 25.6 ug/L

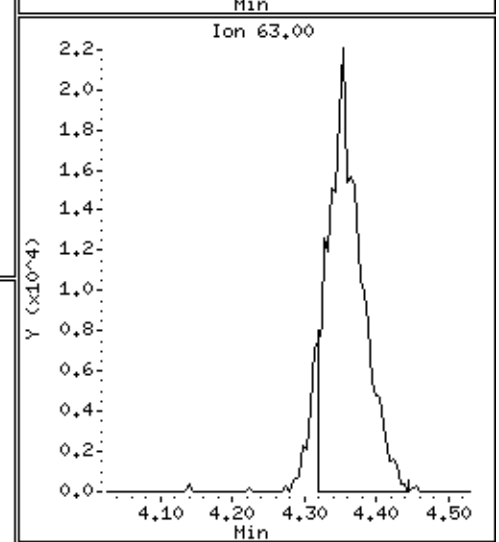


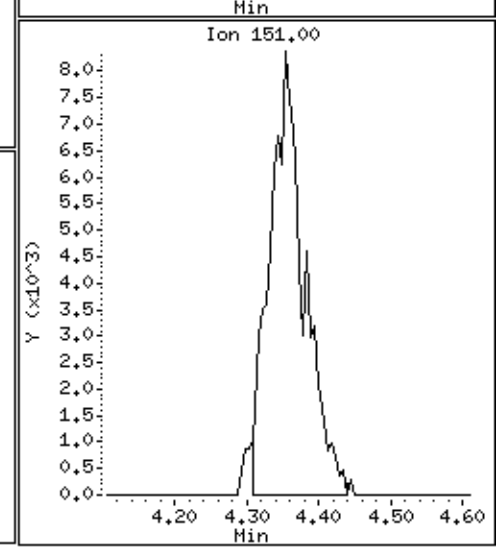












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

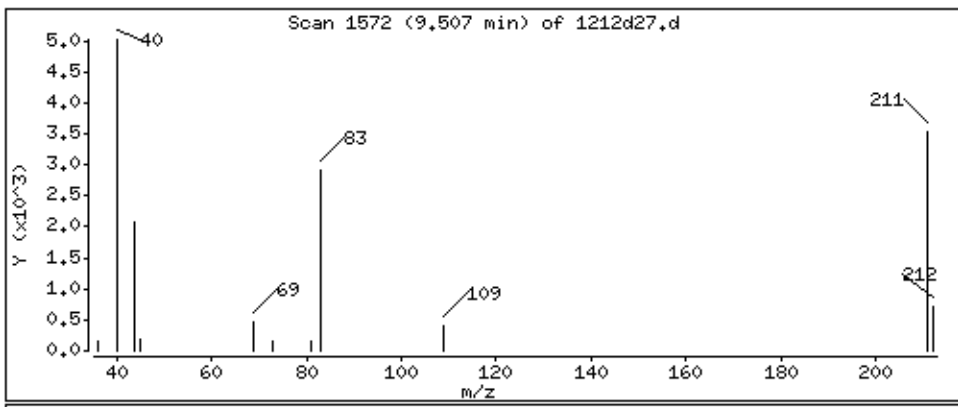
Operator: GEM

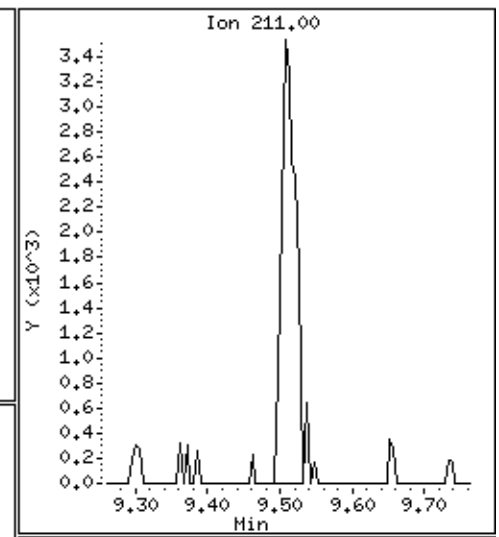
Column phase: DB-624

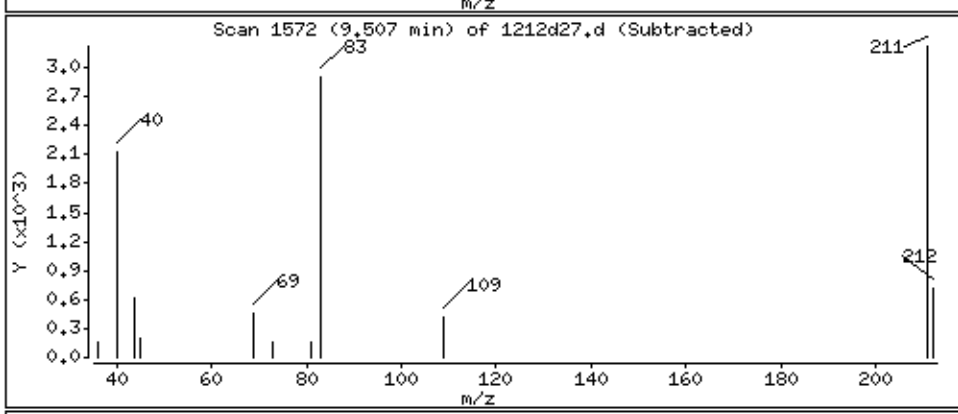
Column diameter: 0.18

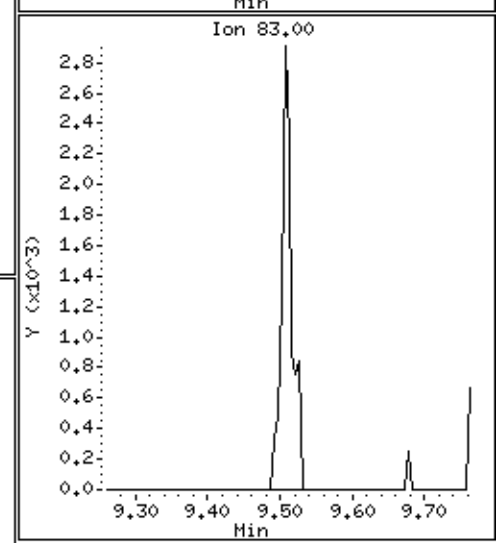
13 Haloether 528

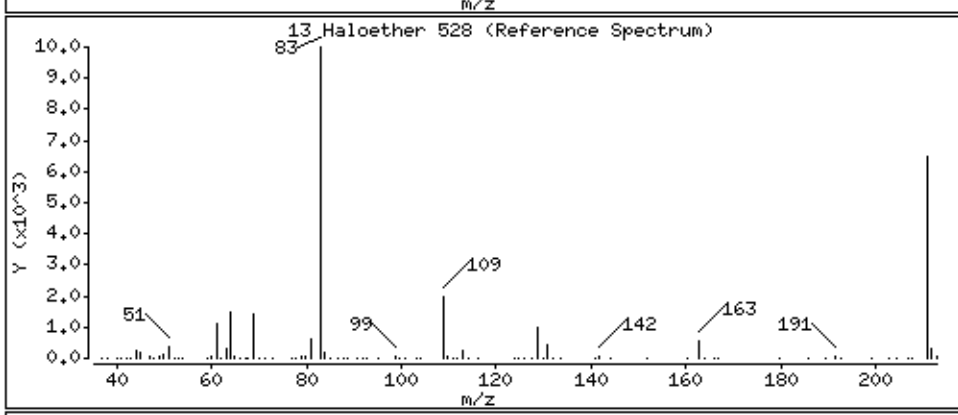
Concentration: 0.390 ug/L

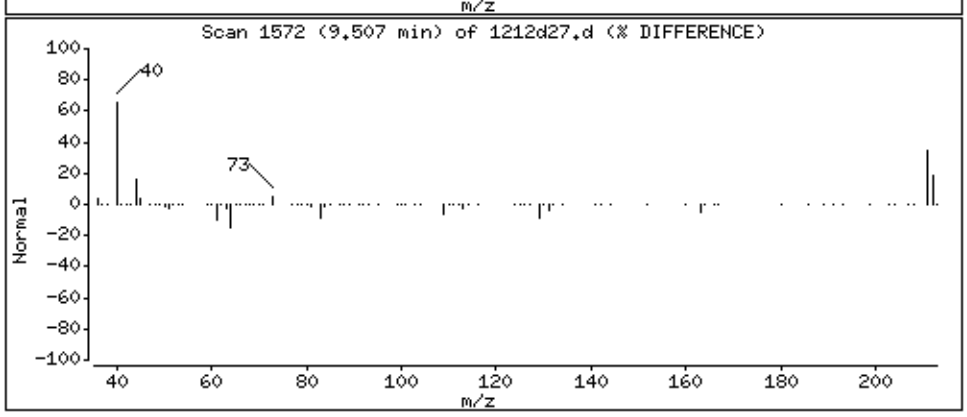












Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d27.d
Injection Date: 12-DEC-2017 16:27
Instrument: 20msvd.i
Lab Sample ID: 2066645013

Compound: Haloether 229 Review Code: LT
CAS Number:

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

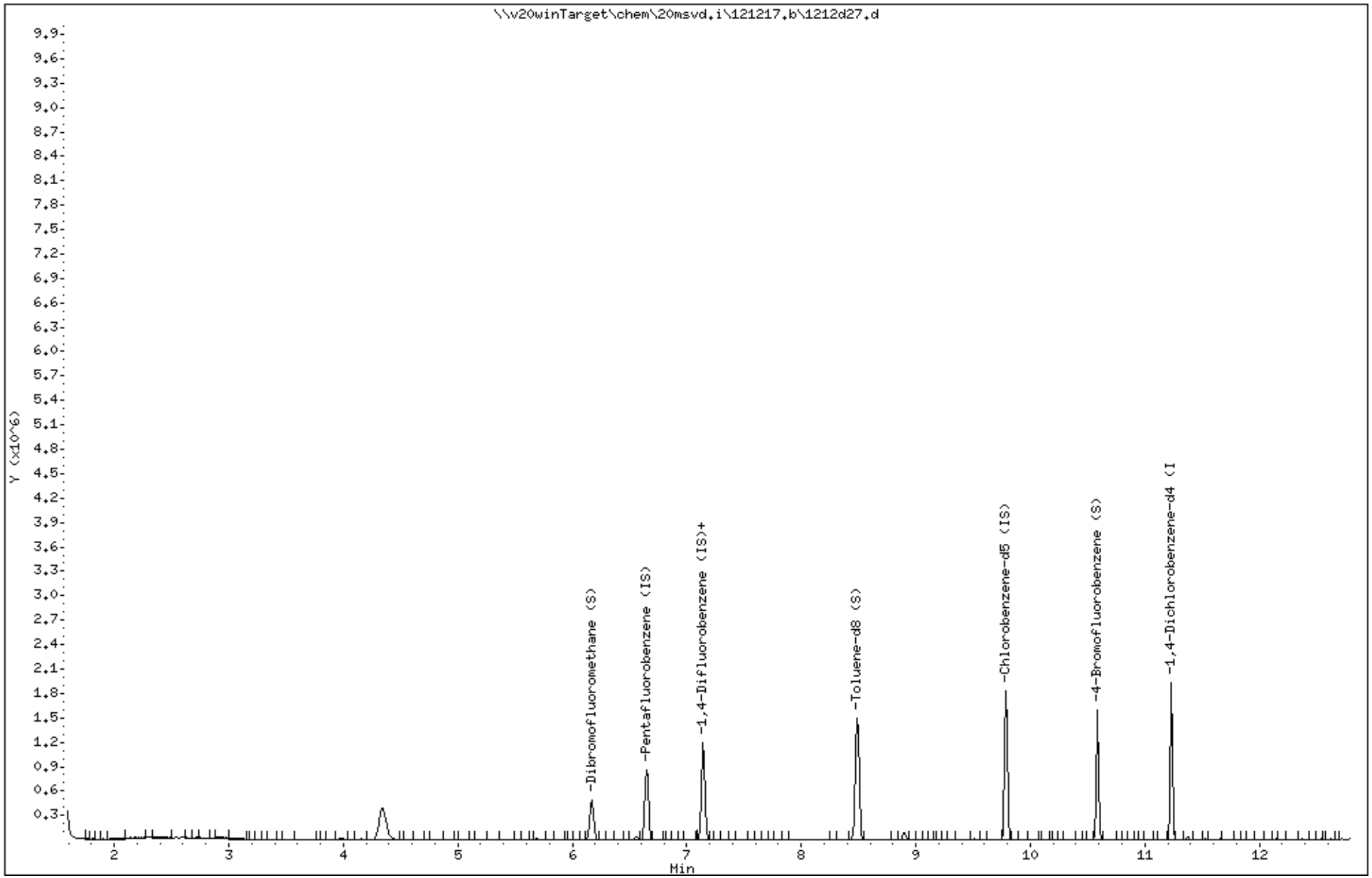
Sample Info: 2066645013

Purge Volume: 5.0

Operator: GEM

Column phase: RTX VMS 30m

Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

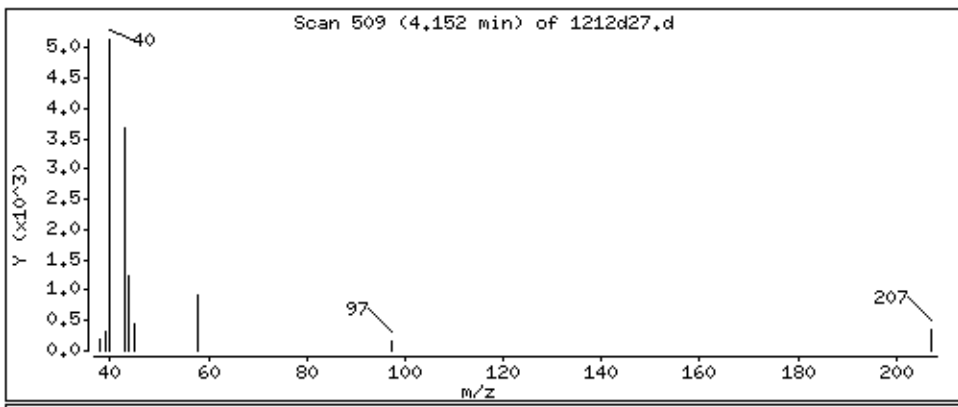
Operator: GEM

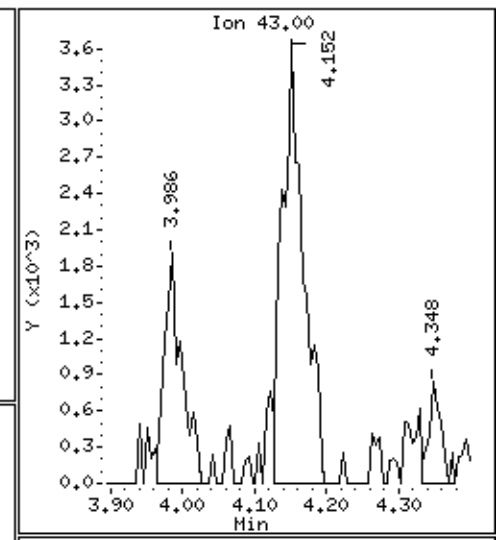
Column phase: RTX VMS 30m

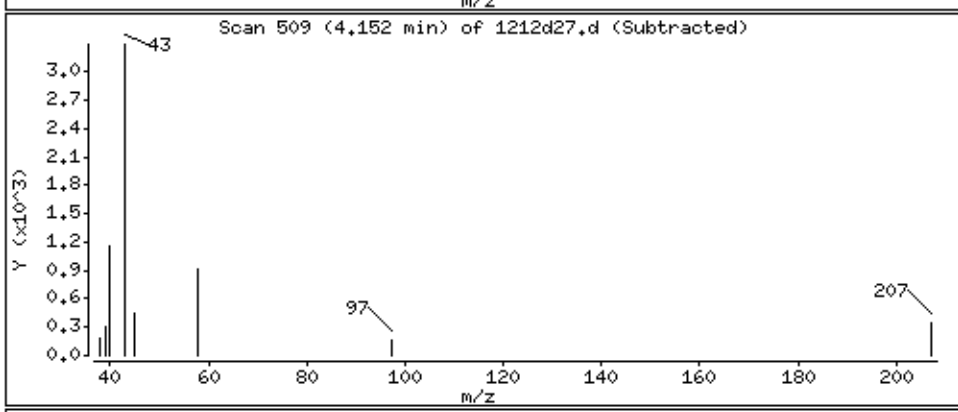
Column diameter: 0.25

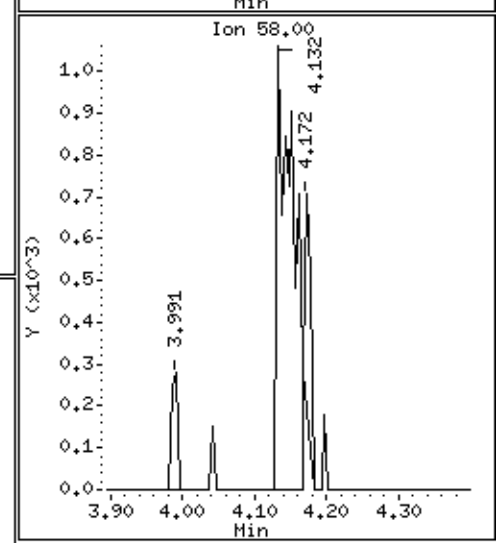
14 Acetone

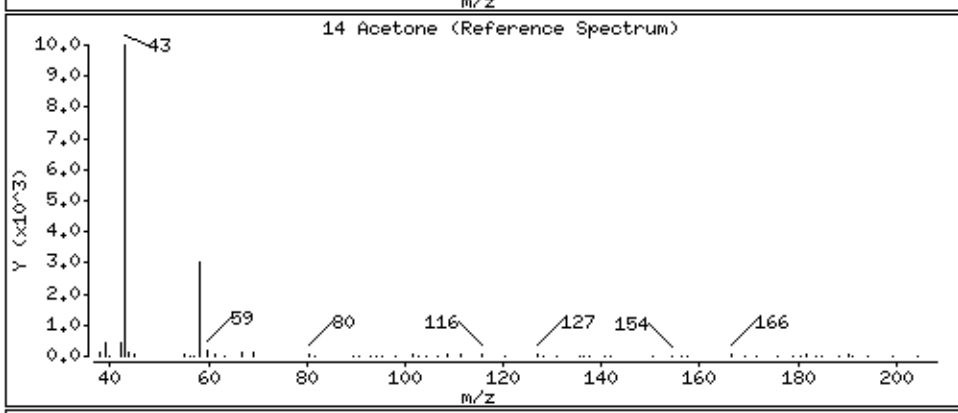
Concentration: 5.93 ug/L

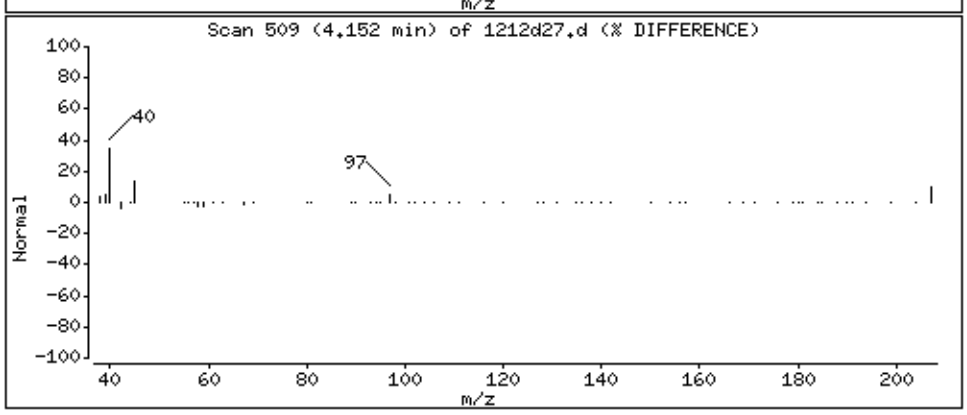












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

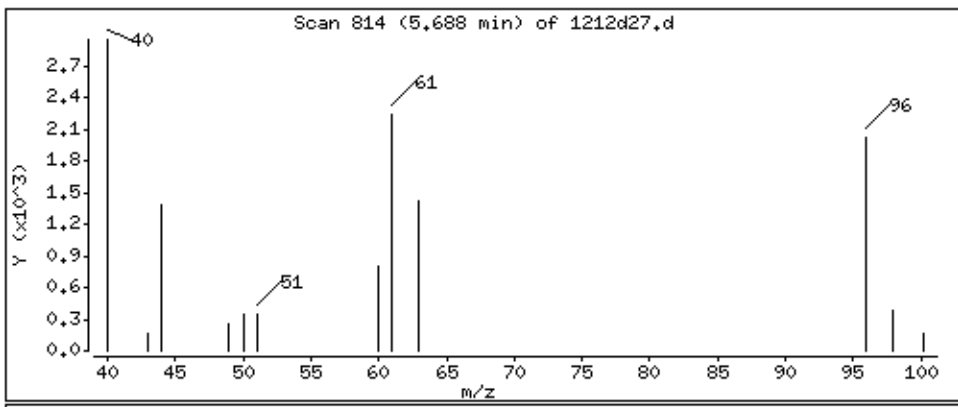
Operator: GEM

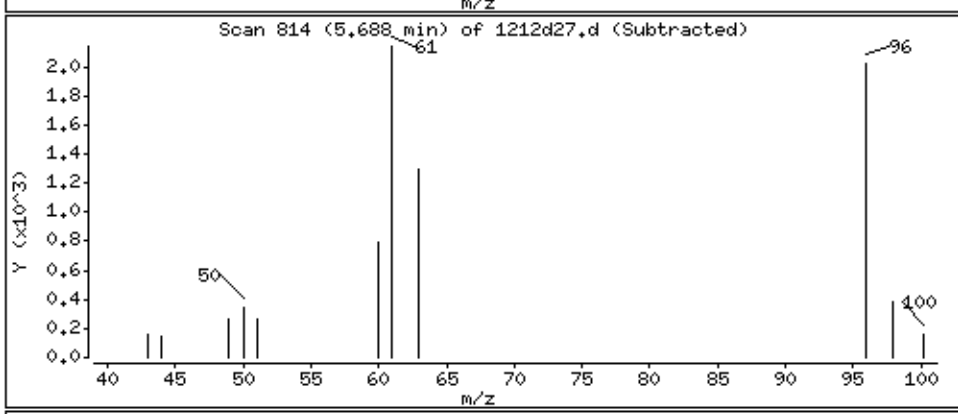
Column phase: RTX VMS 30m

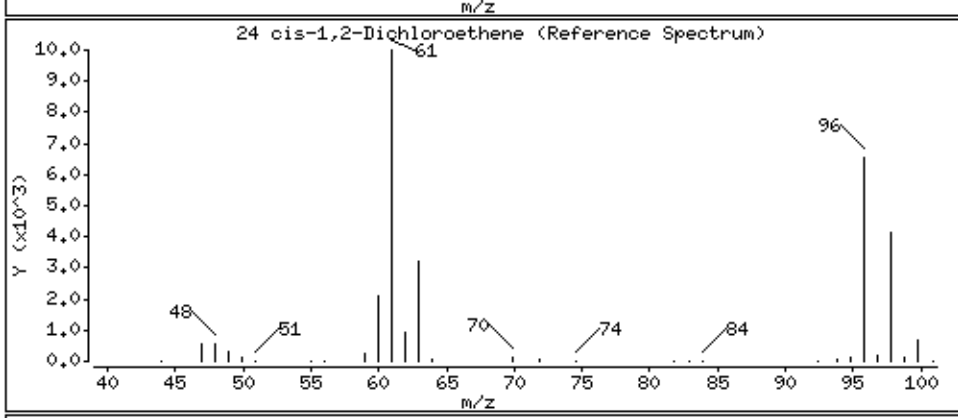
Column diameter: 0.25

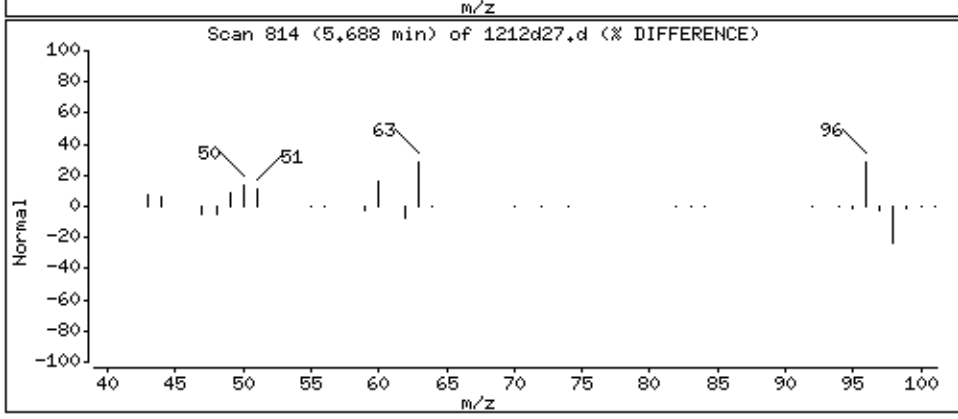
24 cis-1,2-Dichloroethene

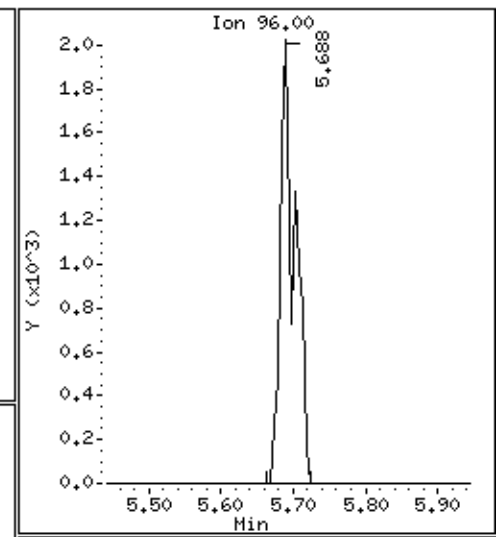
Concentration: 0.520 ug/L

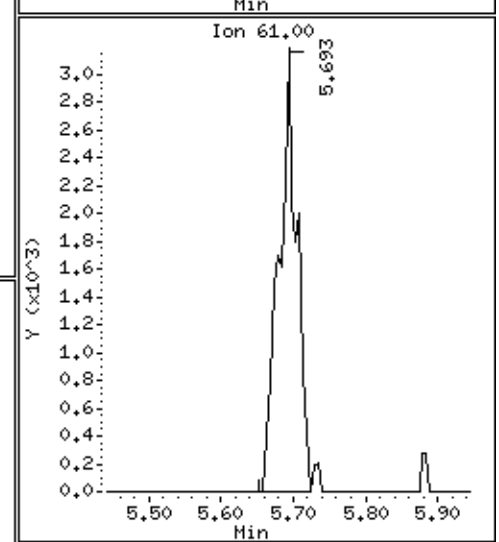


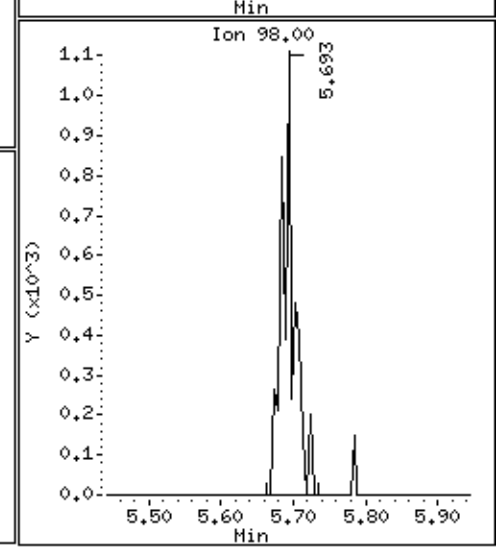












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

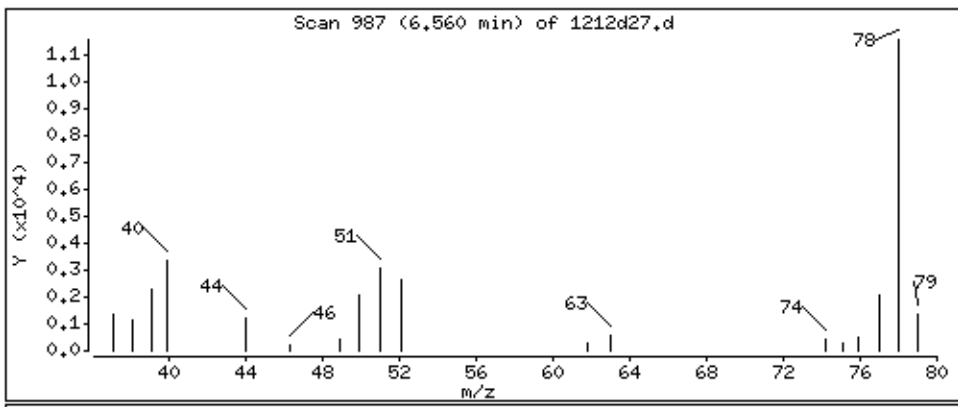
Operator: GEM

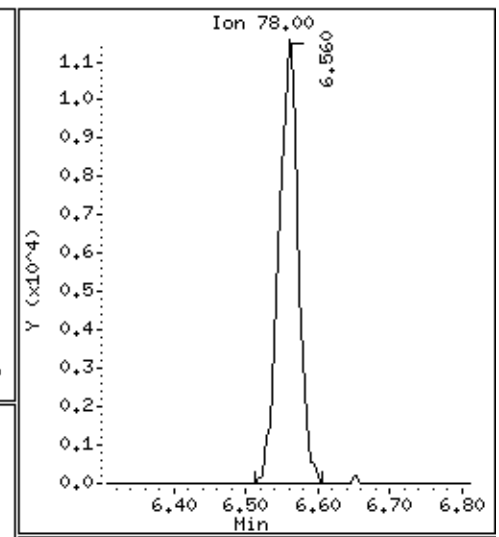
Column phase: RTX VMS 30m

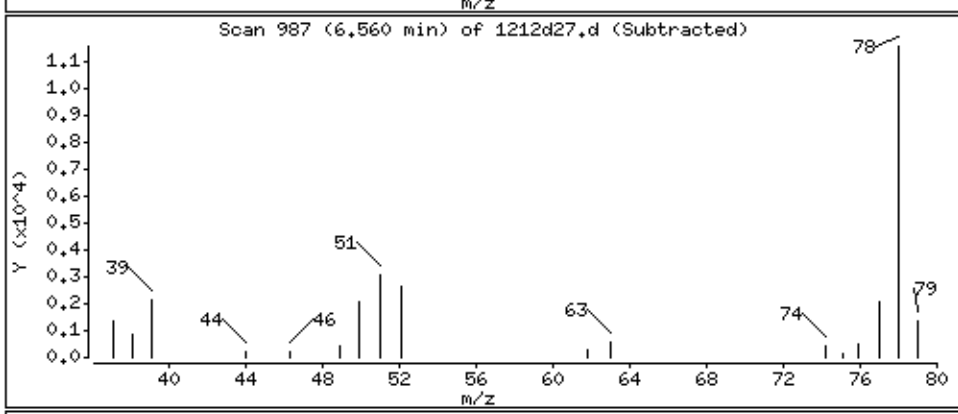
Column diameter: 0.25

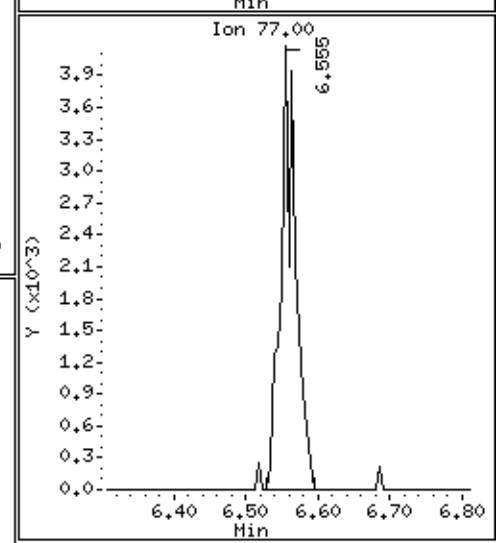
35 Benzene

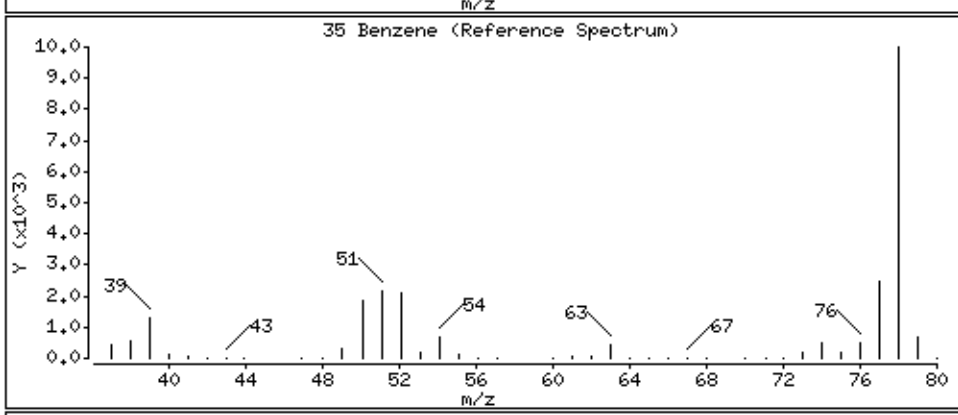
Concentration: 1.18 ug/L

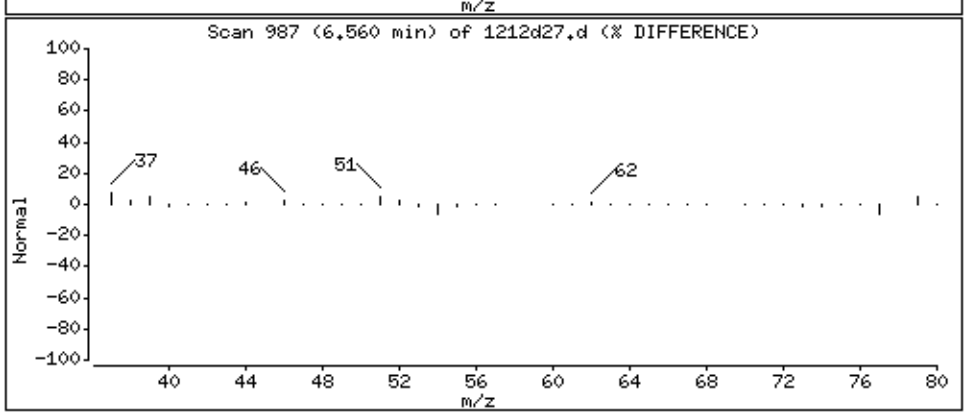












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

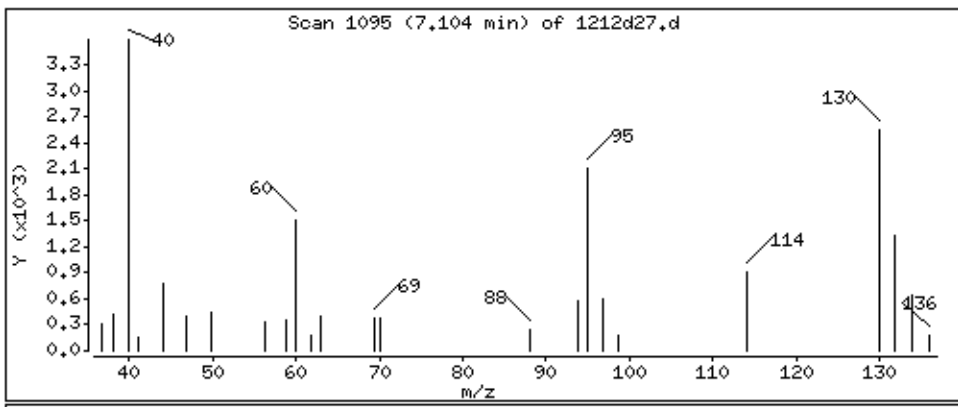
Operator: GEM

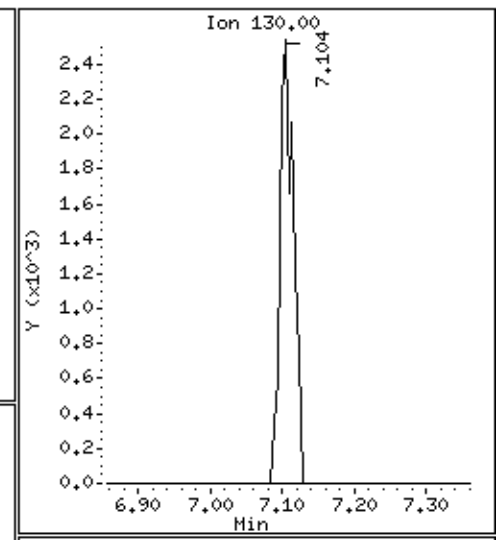
Column phase: RTX VMS 30m

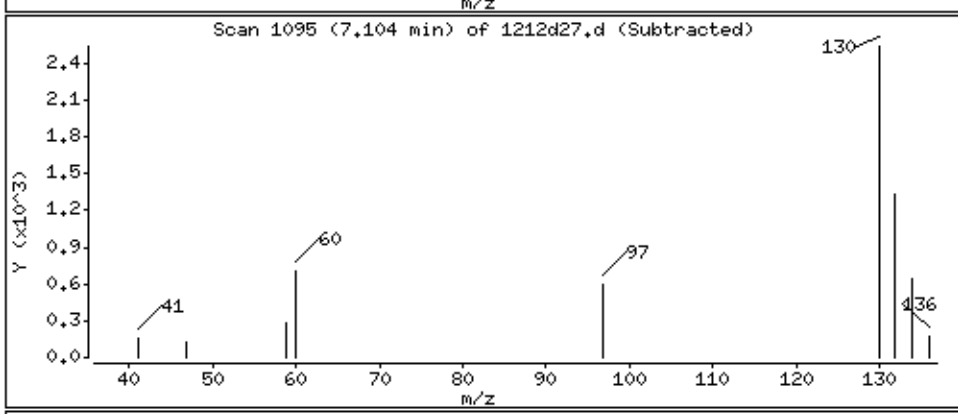
Column diameter: 0.25

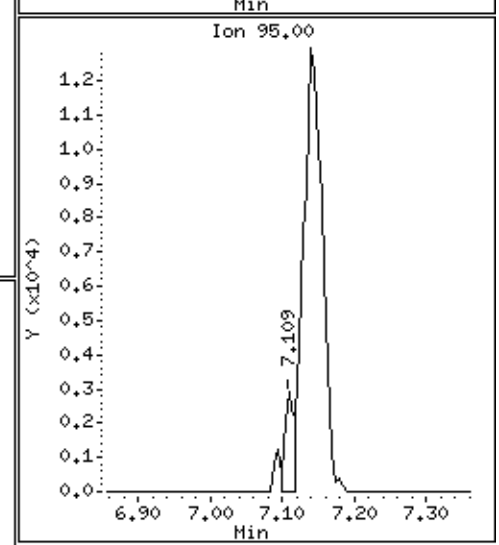
42 Trichloroethene

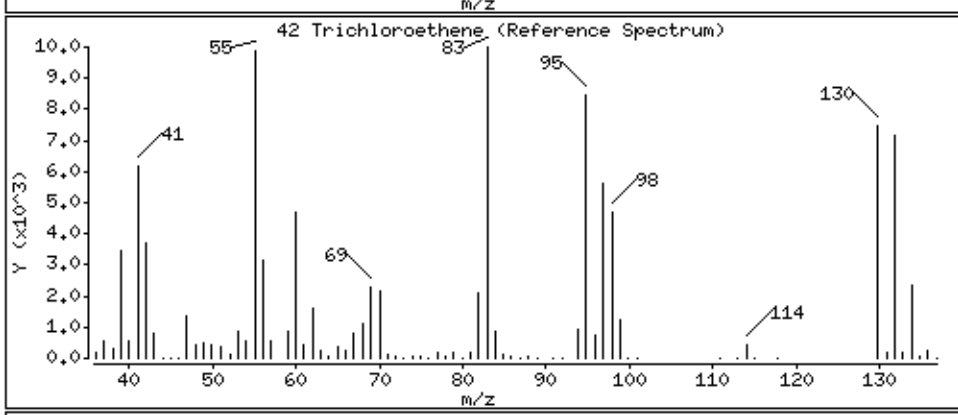
Concentration: 0.592 ug/L

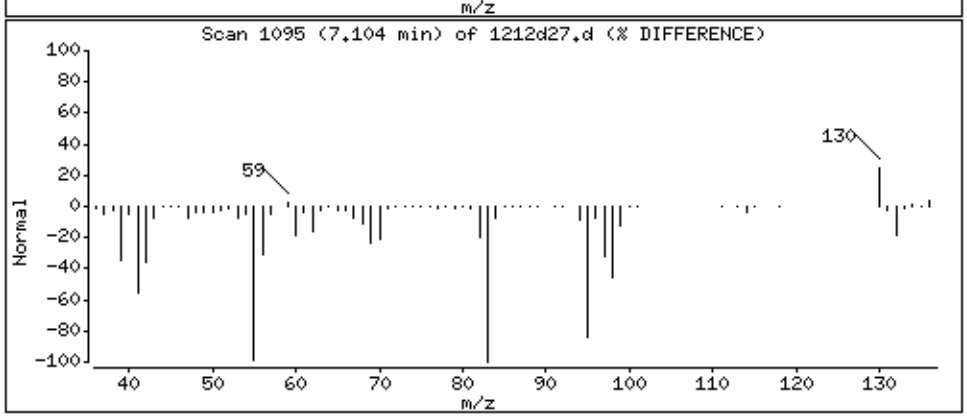












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d27.d

Date : 12-DEC-2017 16:27

Client ID: MW-1D-3

Instrument: 20msvd.i

Sample Info: 2066645013

Purge Volume: 5.0

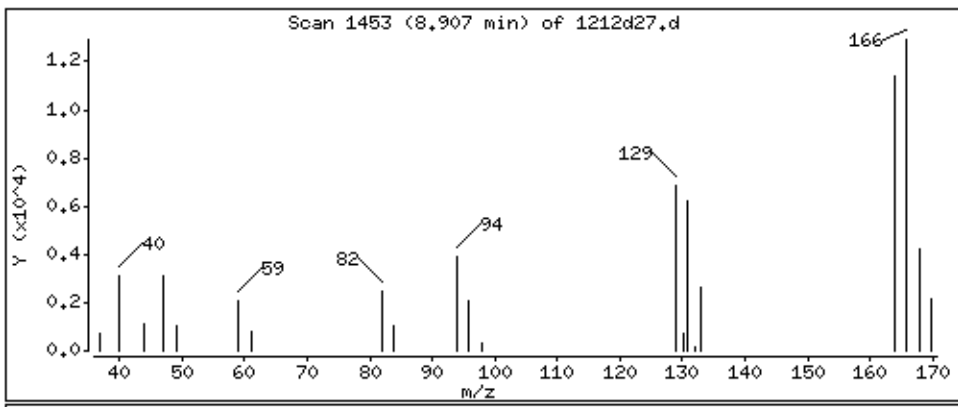
Operator: GEM

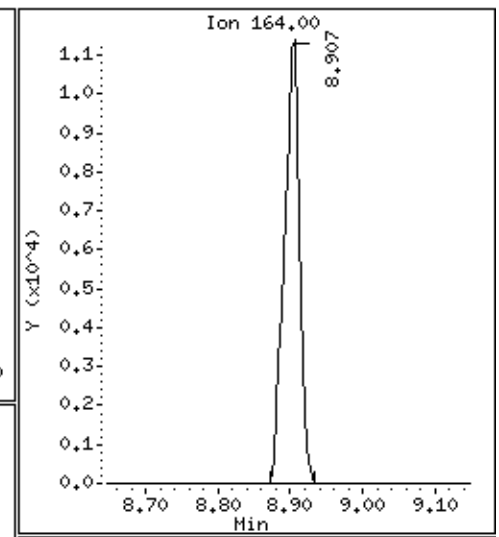
Column phase: RTX VMS 30m

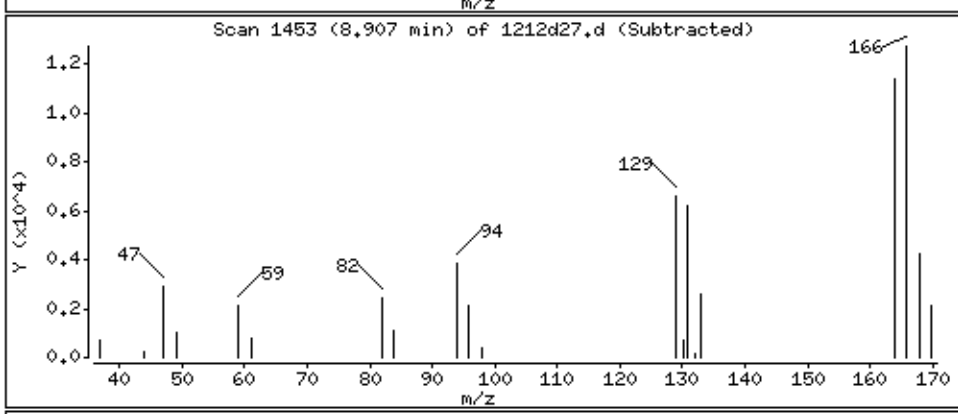
Column diameter: 0.25

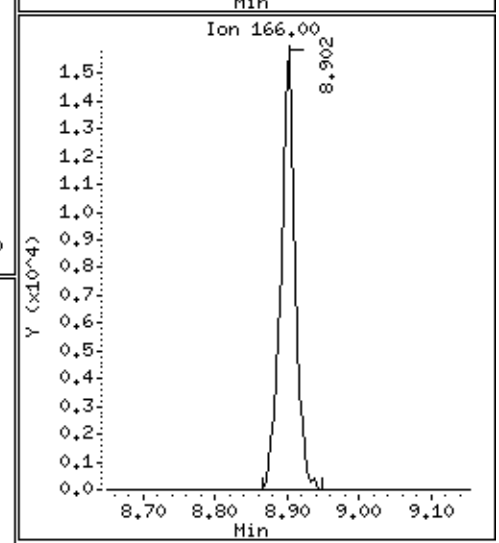
53 Tetrachloroethene

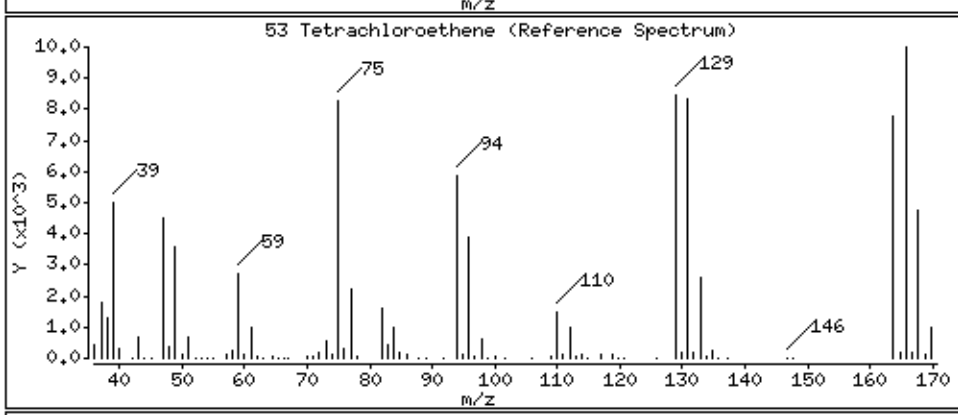
Concentration: 3.71 ug/L

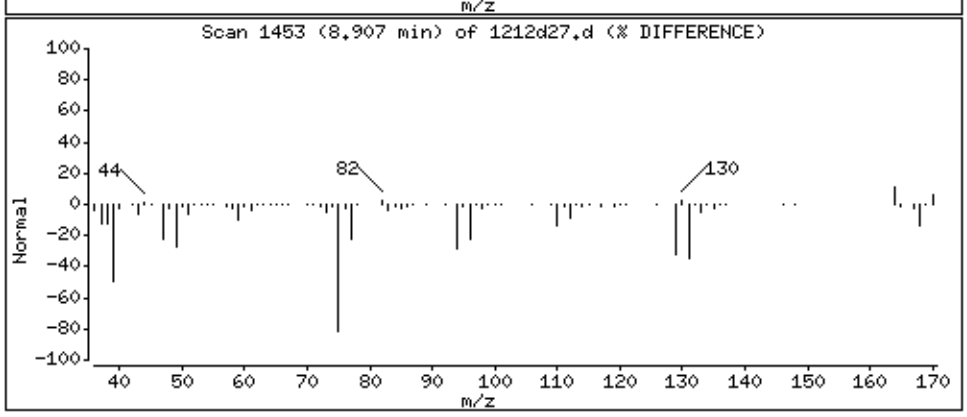












Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d27.d
Injection Date: 12-DEC-2017 16:27
Instrument: 20msvd.i
Lab Sample ID: 2066645013
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

FB-20171206

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:45
Lab Sample ID: 2066645014
Date Analyzed: 12/12/2017 16:45
Lab File ID: 121217HA.B\1212D28.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

SAMPLE NO.

FB-20171206

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:45
Lab Sample ID: 2066645014
Date Analyzed: 12/12/2017 16:45
Lab File ID: 121217.B\1212D28.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.4	
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

FB-20171206

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 16:45
Lab Sample ID: 2066645014
Date Analyzed: 12/12/2017 16:45
Lab File ID: 121217.B\1212D28.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d28.d
Lab Smp Id: 2066645014 Client Smp ID: FB-20171206
Inj Date : 12-DEC-2017 16:45
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645014
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	262432	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	850110	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.789	9.788	(1.000)	354681	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	352481	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d28.d
Lab Smp Id: 2066645014 Client Smp ID: FB-20171206
Inj Date : 12-DEC-2017 16:45
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645014
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.146	4.146	(0.624)	5897	4.44607	4.45(M)	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	291593	50.4706	50.5	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	262432	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	850110	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	955372	50.2274	50.2	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.789	9.788	(1.000)	354681	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.585	10.584	(0.942)	366931	52.6412	52.6	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	76 2-Chlorotoluene	91	Compound Not Detected.						

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	352481	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.
D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d28.d

Date : 12-DEC-2017 16:45

Client ID: FB-20171206

Instrument: 20msvd.i

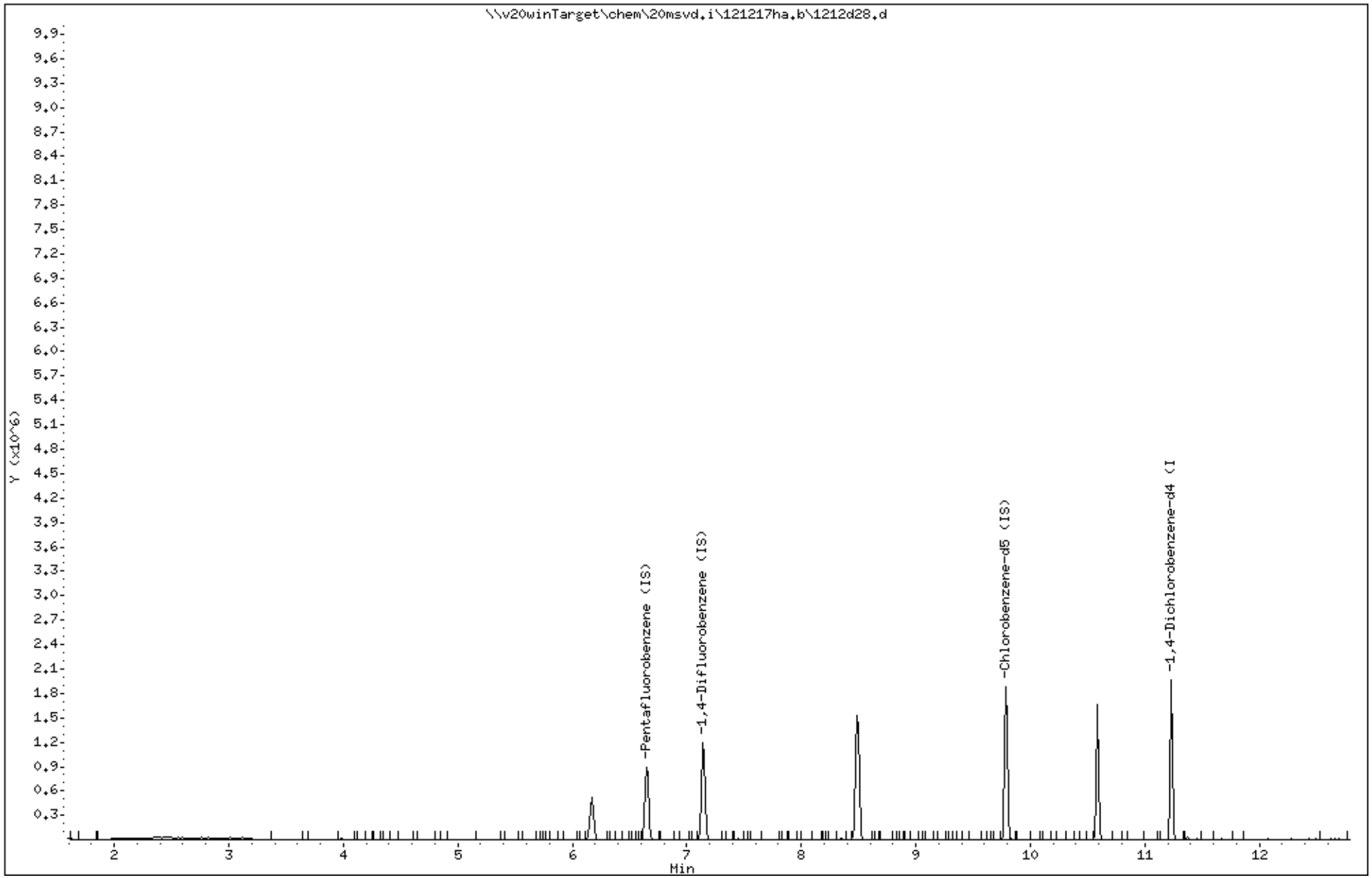
Sample Info: 2066645014

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



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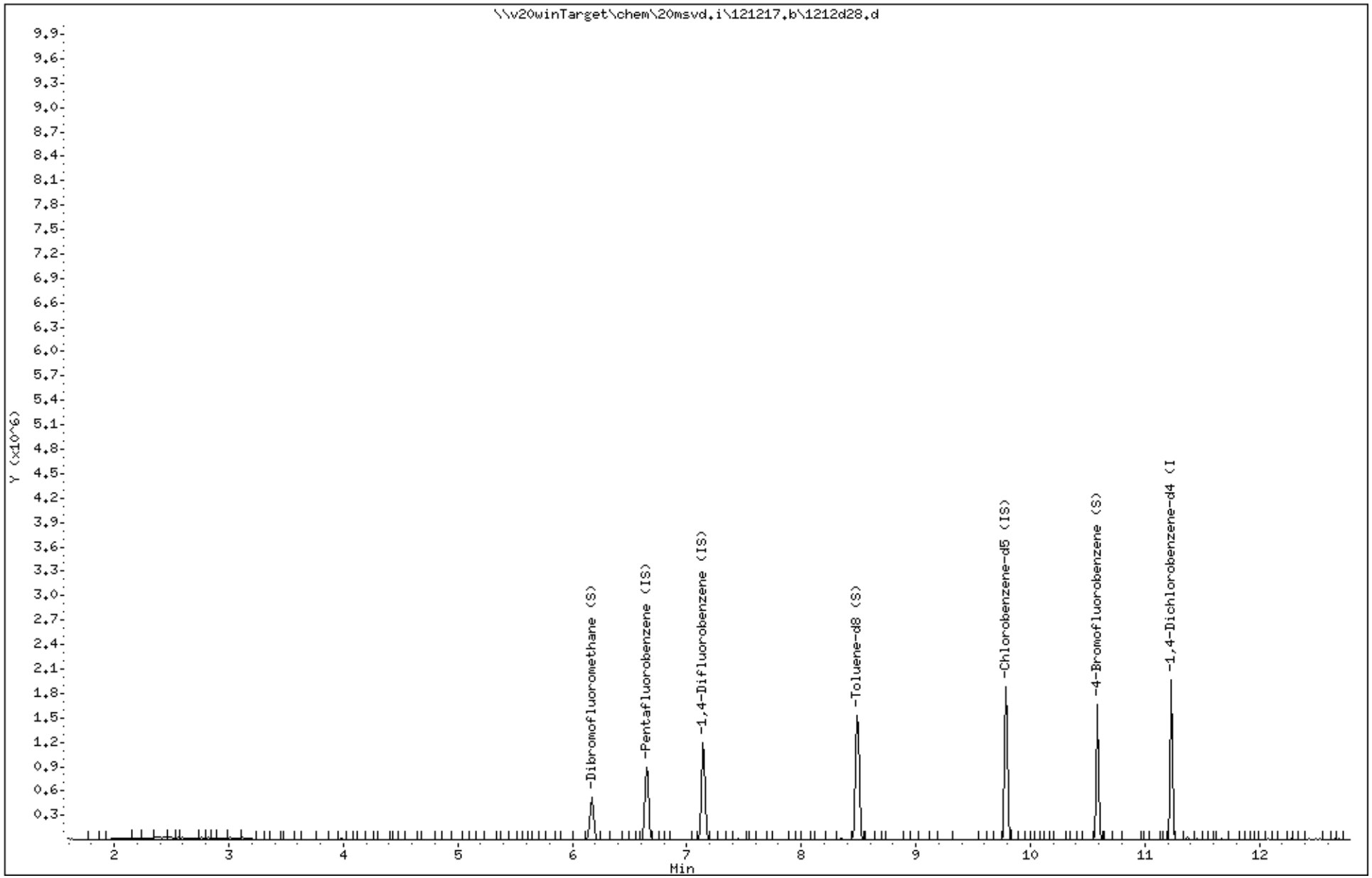
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d28.d
Injection Date: 12-DEC-2017 16:45
Instrument: 20msvd.i
Lab Sample ID: 2066645014
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d28.d
Date : 12-DEC-2017 16:45
Client ID: FB-20171206
Sample Info: 2066645014
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d28.d

Date : 12-DEC-2017 16:45

Client ID: FB-20171206

Instrument: 20msvd.i

Sample Info: 2066645014

Purge Volume: 5.0

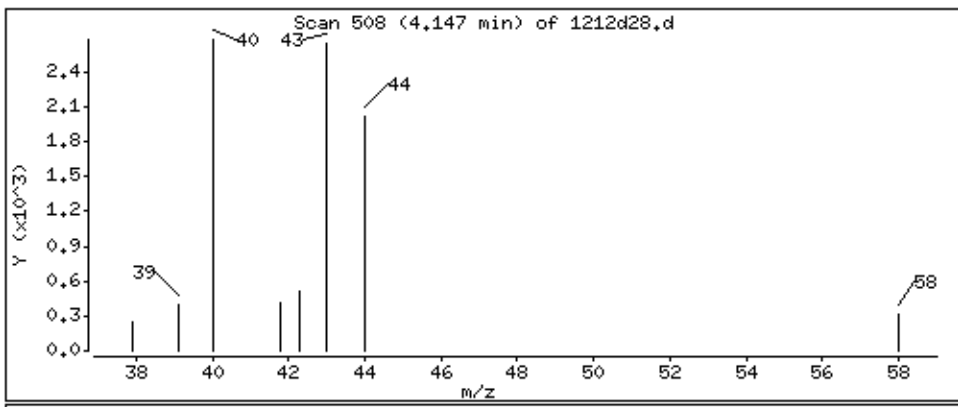
Operator: GEM

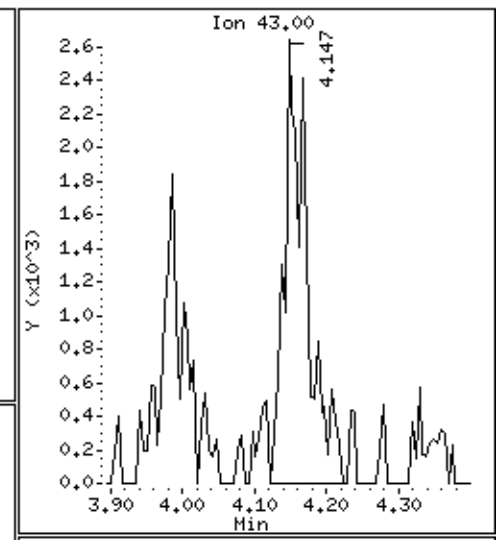
Column phase: RTX VMS 30m

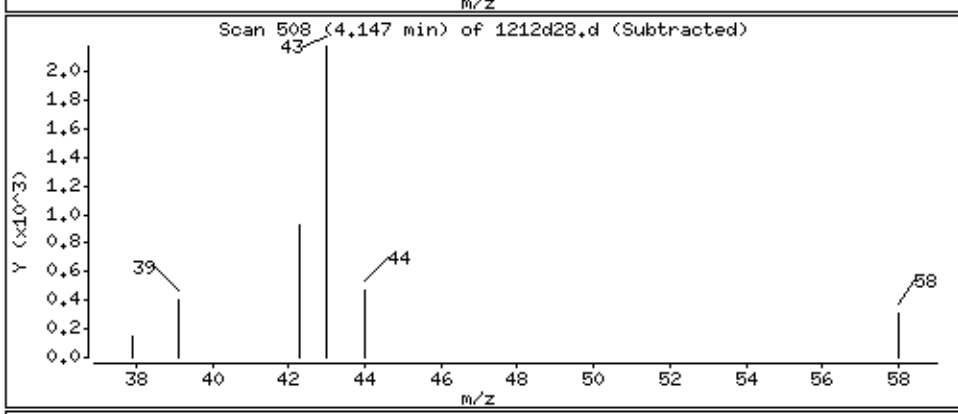
Column diameter: 0.25

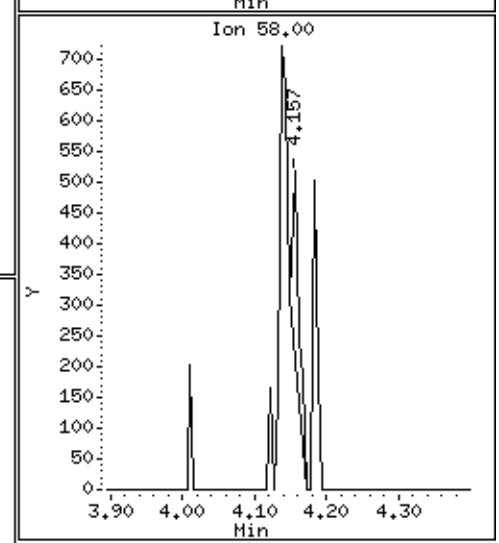
14 Acetone

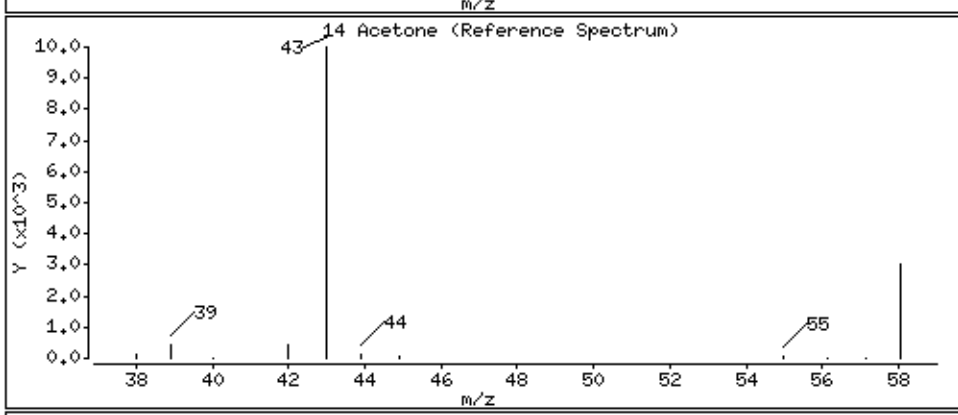
Concentration: 4.45 ug/L

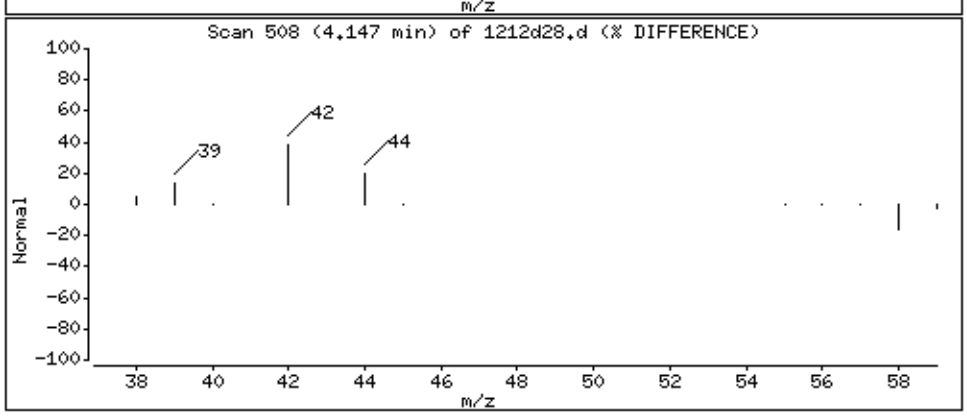






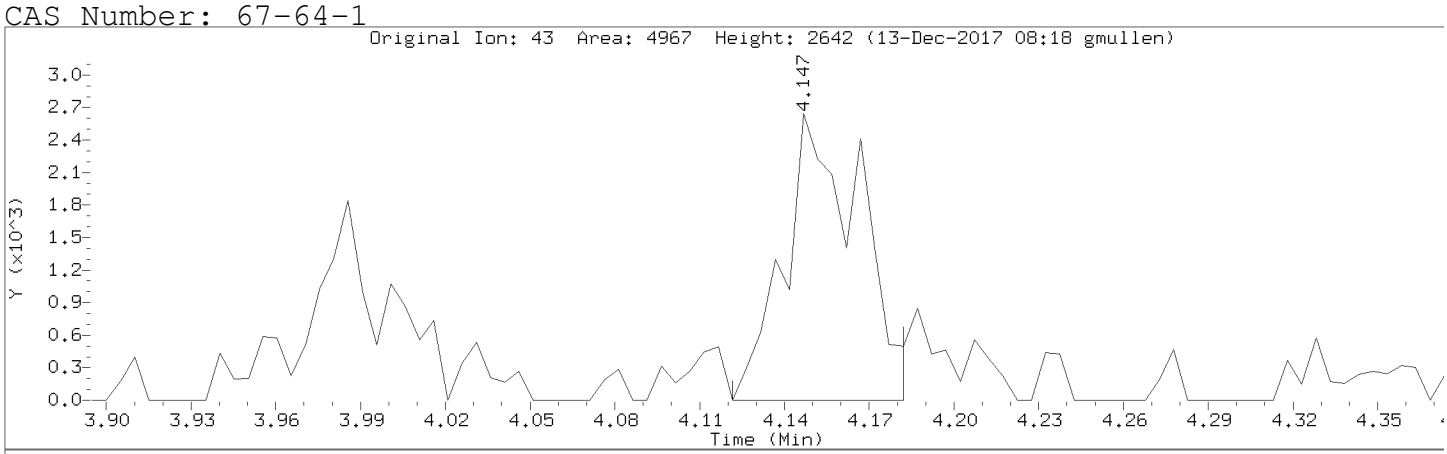


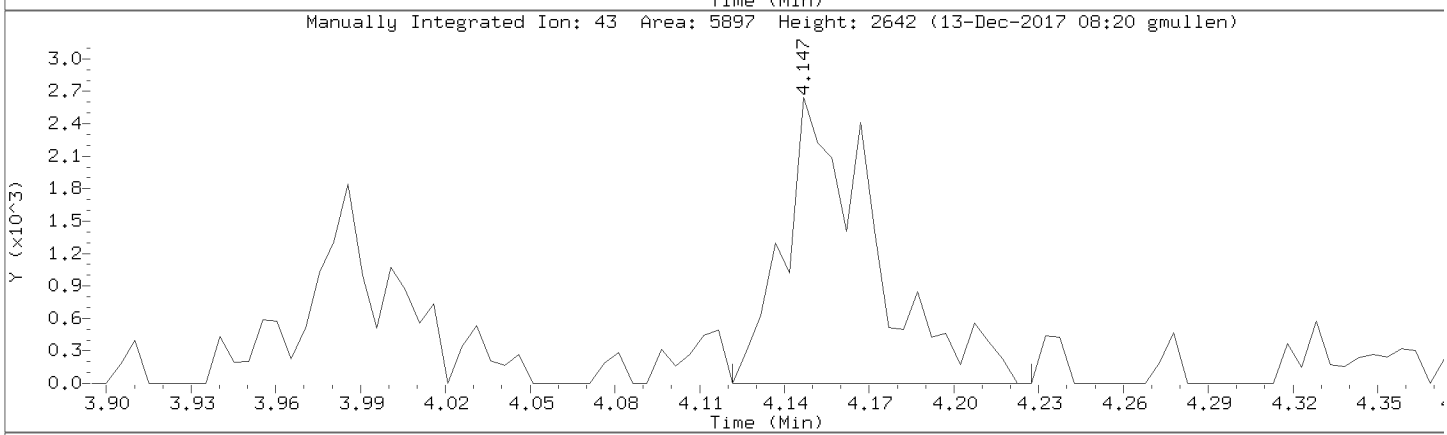


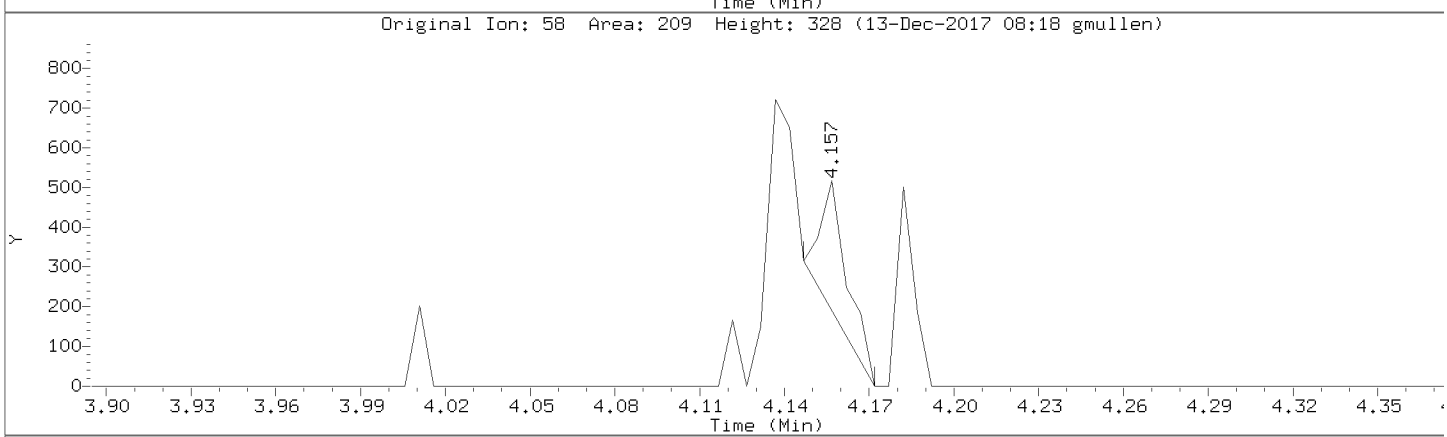


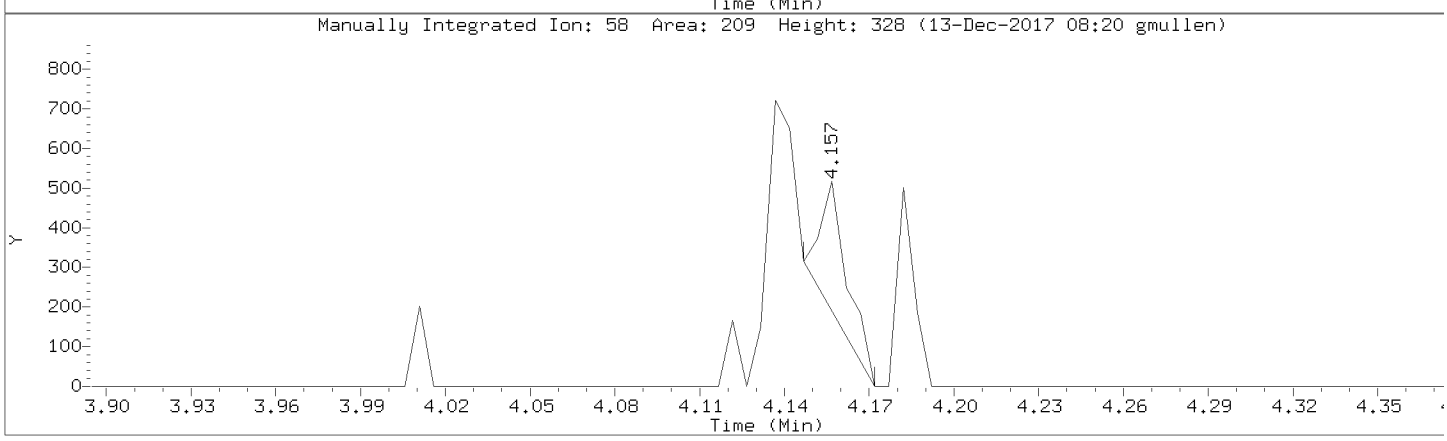
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d28.d
Injection Date: 12-DEC-2017 16:45
Instrument: 20msvd.i
Lab Sample ID: 2066645014

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









SAMPLE NO.

MW-9-90

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 17:03
Lab Sample ID: 2066645015
Date Analyzed: 12/12/2017 17:03
Lab File ID: 121217HA.B\1212D29.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

SAMPLE NO.

MW-9-90

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 17:03
Lab Sample ID: 2066645015
Date Analyzed: 12/12/2017 17:03
Lab File ID: 121217.B\1212D29.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

MW-9-90

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received: 12/08/2017 10:30
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 17:03
Lab Sample ID: 2066645015
Date Analyzed: 12/12/2017 17:03
Lab File ID: 121217.B\1212D29.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d29.d
Lab Smp Id: 2066645015 Client Smp ID: MW-9-90
Inj Date : 12-DEC-2017 17:03
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645015
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	279191	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	876883	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	381939	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	364612	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d29.d
Lab Smp Id: 2066645015 Client Smp ID: MW-9-90
Inj Date : 12-DEC-2017 17:03
Operator : GEM Inst ID: 20msvd.i
Smp Info : 2066645015
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	4.146	4.146	(0.624)	4474	3.14369	3.14	
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	305408	49.6886	49.7	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	279191	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	876883	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	987401	50.3263	50.3	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	381939	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	373078	51.7423	51.7	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D
	76 2-Chlorotoluene	91	Compound Not Detected.						

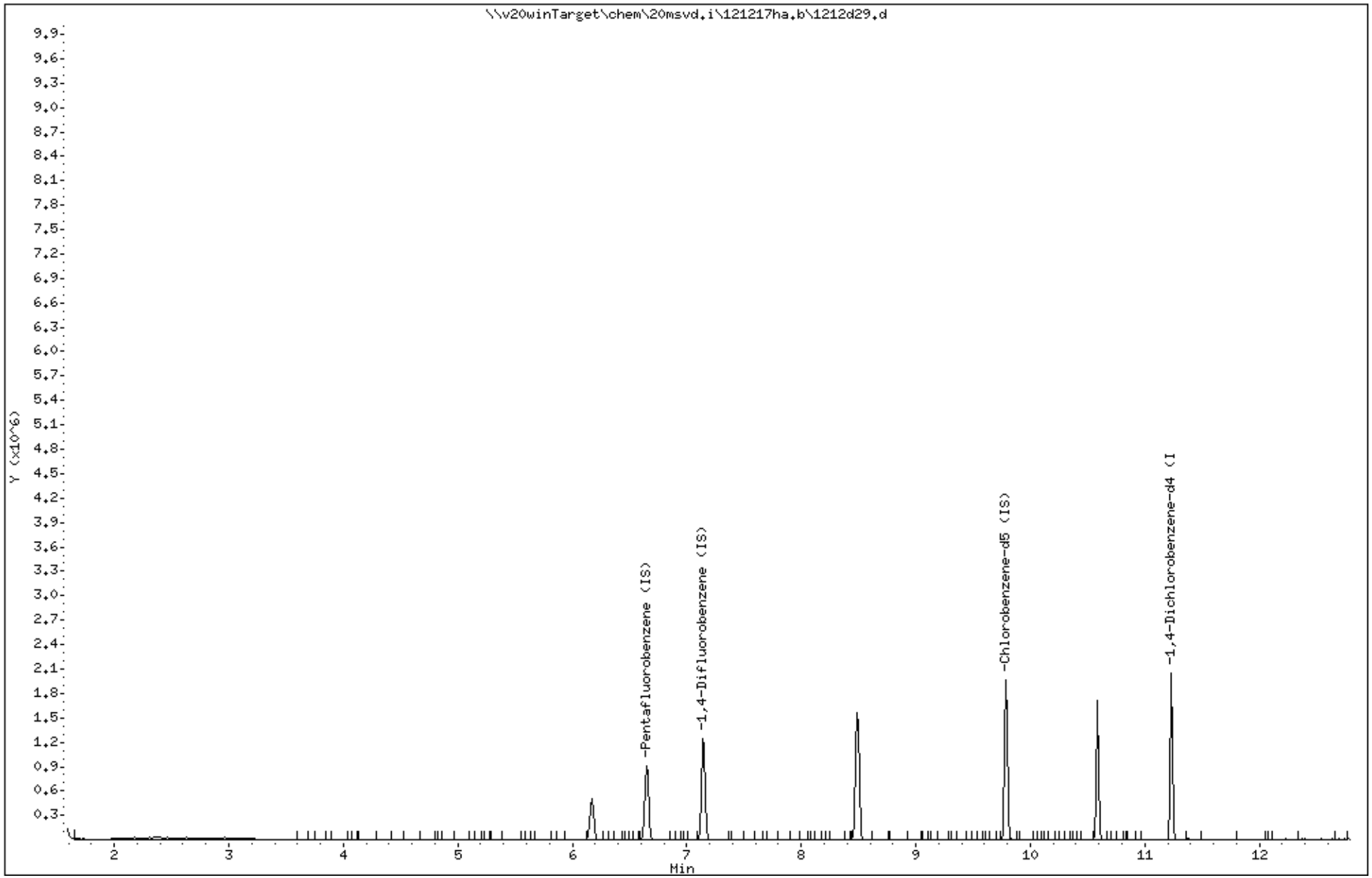
Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
79 4-Chlorotoluene	91	Compound Not Detected.						
80 tert-Butylbenzene	91	Compound Not Detected.						
81 Pentachloroethane	167	Compound Not Detected.						
82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
83 sec-Butylbenzene	105	Compound Not Detected.						
84 p-Isopropyltoluene	119	Compound Not Detected.						
85 1,3-Dichlorobenzene	146	Compound Not Detected.						
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	364612	50.0000		
87 1,4-Dichlorobenzene	146	Compound Not Detected.						
88 n-Butylbenzene	91	Compound Not Detected.						(D
89 1,2-Dichlorobenzene	146	Compound Not Detected.						
90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
91 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
92 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
93 Naphthalene	128	Compound Not Detected.						
94 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

D - User disabled compound identification.

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d29.d
Date : 12-DEC-2017 17:03
Client ID: MW-9-90
Sample Info: 2066645015
Purge Volume: 5.0
Column phase: DB-624

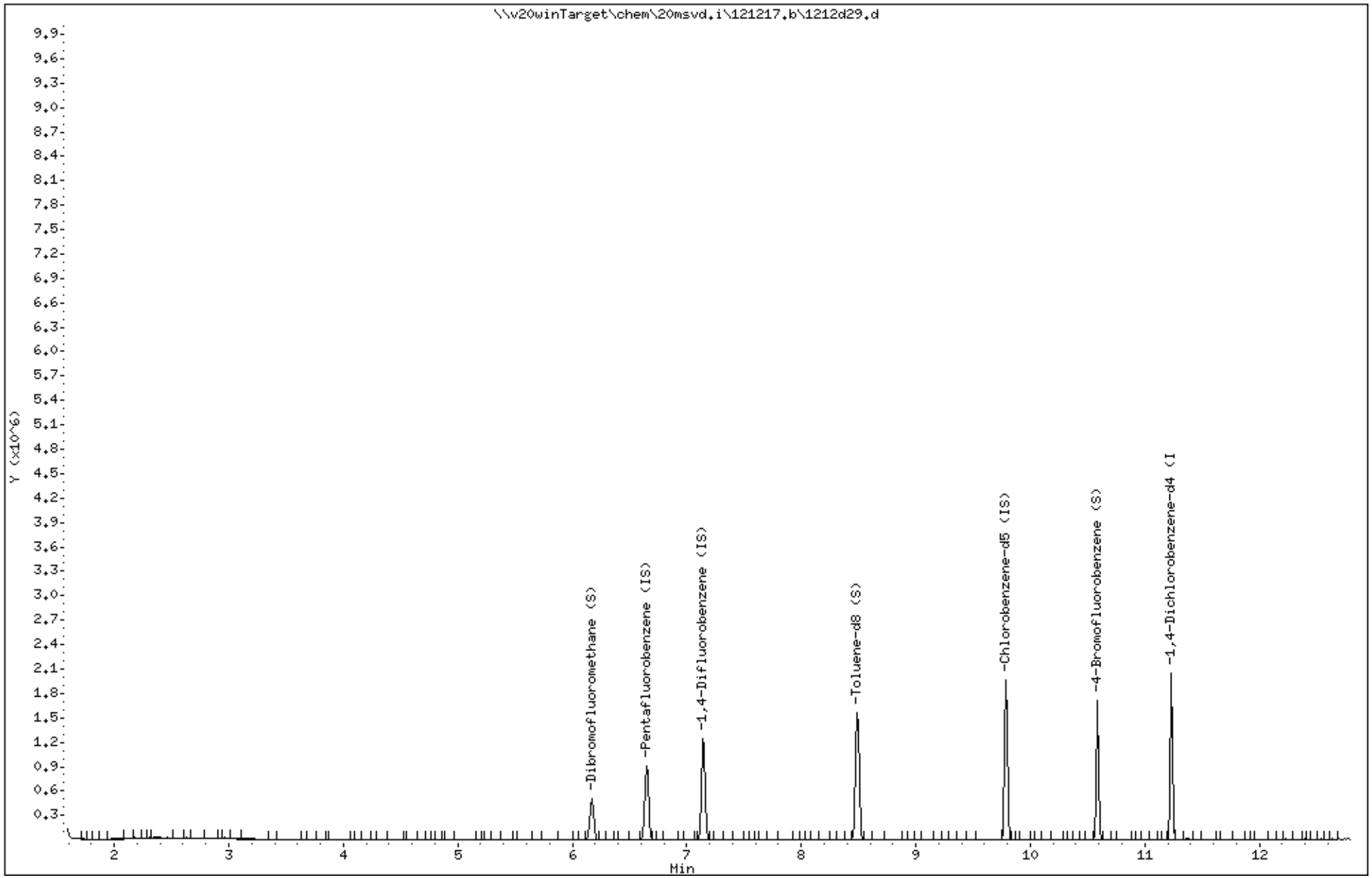
Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d29.d
Injection Date: 12-DEC-2017 17:03
Instrument: 20msvd.i
Lab Sample ID: 2066645015
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d29.d
Date : 12-DEC-2017 17:03
Client ID: MW-9-90
Sample Info: 2066645015
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



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Date : 12-DEC-2017 17:03

Client ID: MW-9-90

Instrument: 20msvd.i

Sample Info: 2066645015

Purge Volume: 5.0

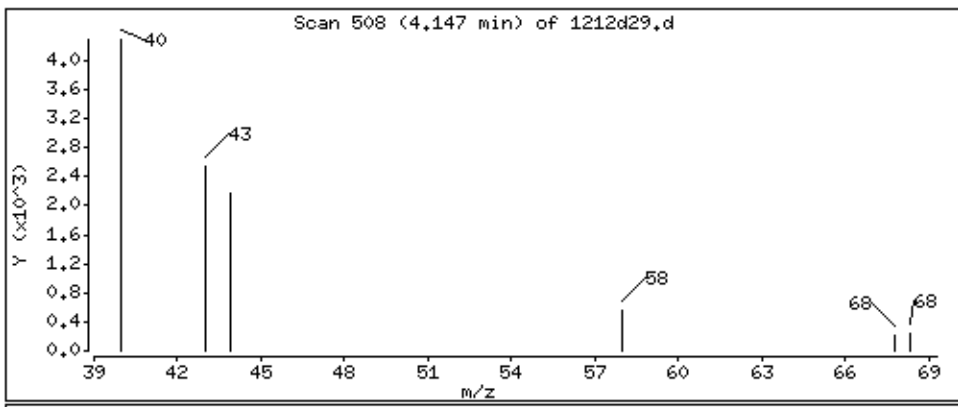
Operator: GEM

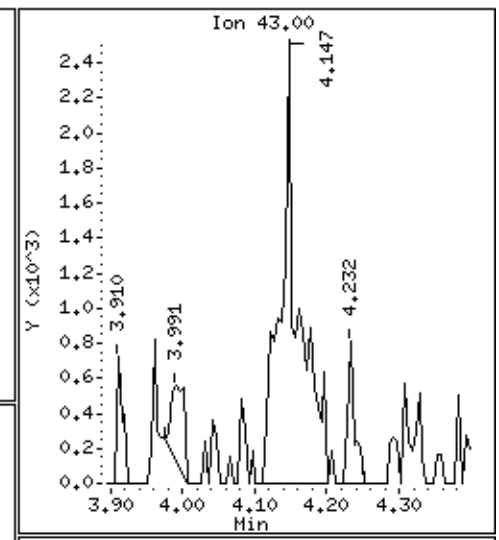
Column phase: RTX VMS 30m

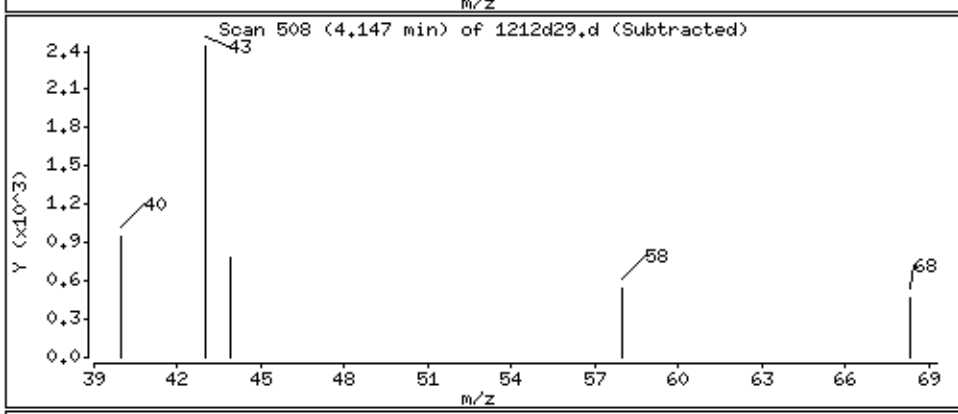
Column diameter: 0.25

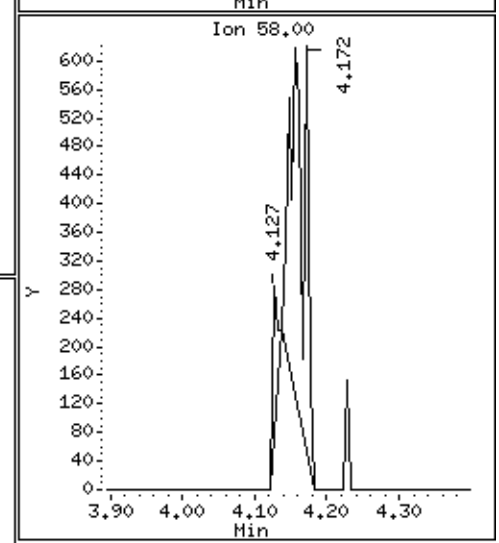
14 Acetone

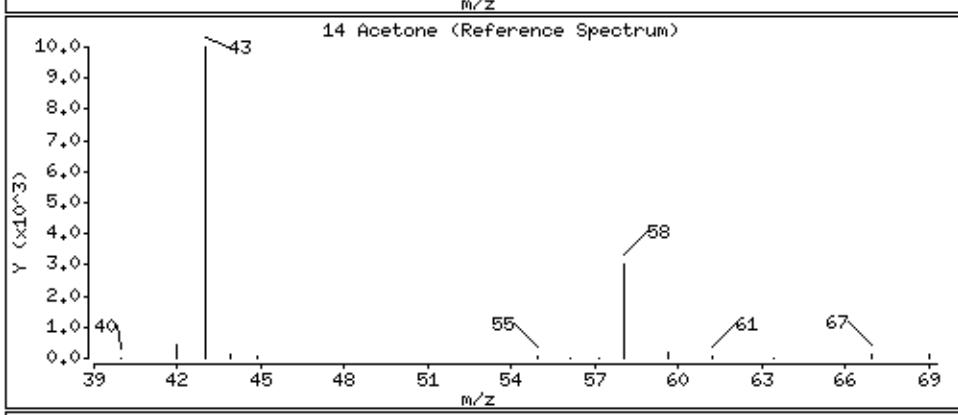
Concentration: 3.14 ug/L

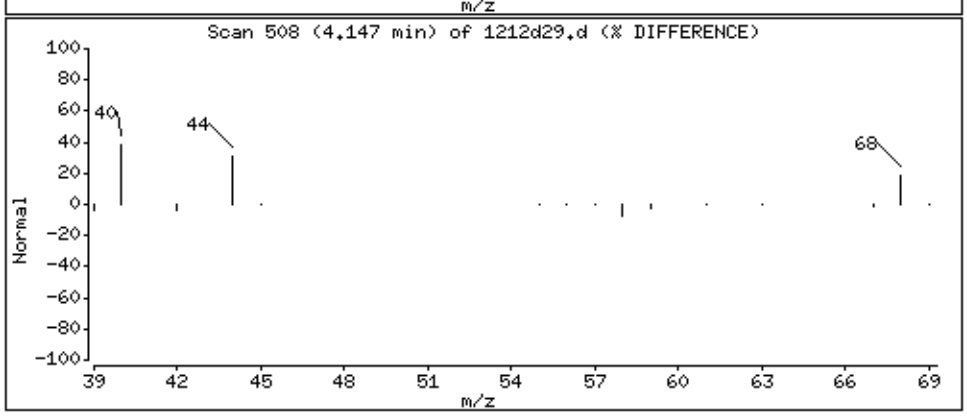












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Injection Date: 12-DEC-2017 17:03
Instrument: 20msvd.i
Lab Sample ID: 2066645015
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 11/17/2017 11/17/2017 Calibration Time(s): 09:29 11:16

LAB FILE ID

CAL1 =	111717.B\1117D05.D	CAL1 =	111717HA.B\1117D05.D	CAL2 =	111717HA.B\1117D06.D
CAL2 =	111717.B\1117D06.D	CAL3 =	111717HA.B\1117D07.D	CAL3 =	111717.B\1117D07.D
CAL4 =	111717.B\1117D08.D	CAL4 =	111717HA.B\1117D08.D	CAL5 =	111717HA.B\1117D09.D
CAL5 =	111717.B\1117D09.D	CAL6 =	111717HA.B\1117D10.D	CAL6 =	111717.B\1117D10.D
CAL7 =	111717HA.B\1117D11.D	CAL7 =	111717.B\1117D11.D		

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Linear		0.29394	0.22615	0.21306	0.20536	0.18354
Acrolein	Linear		0.35426	0.18571	0.14421	0.14116	0.14125
Acrylonitrile	Averaged		0.30613	0.31203	0.26689	0.28347	0.28006
Benzene	Averaged	1.03894	1.21281	1.19204	1.21323	1.19820	1.14587
Bromodichloromethane	Averaged	0.38433	0.37099	0.40416	0.40889	0.40649	0.39288
Bromoform	Averaged	0.32543	0.32850	0.36256	0.39406	0.42235	0.42711
Bromomethane	Averaged	0.99879	1.09488	0.85153	0.86667	0.83737	0.82651
2-Butanone (MEK)	Averaged		0.32885	0.38215	0.31453	0.33468	0.31111
Carbon disulfide	Averaged		2.74517	2.60945	2.64148	2.58864	2.58781
Carbon tetrachloride	Averaged	0.34535	0.38509	0.42932	0.43915	0.44214	0.43282
Chlorobenzene	Averaged	1.49030	1.53746	1.71240	1.69258	1.68535	1.68891
Chloroethane	Averaged	0.98505	1.23543	0.92944	0.95172	0.93066	0.83353
Chloroform	Averaged	1.45009	1.74617	1.66831	1.67804	1.71498	1.69390
Chloromethane	Averaged	1.31533	1.26072	1.39102	1.34748	1.38065	1.35319
Dibromochloromethane	Averaged	0.53007	0.50770	0.55137	0.58100	0.60364	0.60038
Dibromomethane	Averaged		0.18363	0.18117	0.17558	0.18464	0.17718
1,1-Dichloroethane	Averaged	1.70949	1.72768	1.97786	2.05245	2.05138	2.02412
1,2-Dichloroethane	Averaged	0.39343	0.38617	0.42480	0.43283	0.44319	0.42805
1,1-Dichloroethene	Averaged	0.75000	0.80724	0.86322	0.83083	0.85788	0.85929
cis-1,2-Dichloroethene	Averaged		0.96524	0.98806	0.96228	0.98440	0.98019
trans-1,2-Dichloroethene	Averaged	0.88693	0.92173	0.83977	0.88070	0.87708	0.88927
1,2-Dichloropropane	Averaged	0.30290	0.36889	0.37296	0.36906	0.37415	0.35804
cis-1,3-Dichloropropene	Averaged	0.43700	0.42106	0.47201	0.49092	0.49836	0.47615
trans-1,3-Dichloropropene	Averaged	0.28583	0.36692	0.39292	0.40745	0.42249	0.40274
Enflurane	Averaged	0.76253	0.99587	0.93976	0.91343	0.93661	0.92957
Ethylbenzene	Averaged	2.51558	2.61363	2.96267	2.94688	2.90794	2.88528
Haloether 229	Averaged	0.69455	0.96963	0.76570	0.79482	0.77185	0.74916
Haloether 406	Averaged	1.29857	1.34523	1.37544	1.32839	1.40091	1.39357
Haloether 421	Averaged	0.53135	0.61997	0.61248	0.61219	0.61350	0.59332
Haloether 427	Averaged	0.34470	0.43445	0.42548	0.42935	0.43615	0.43999
Haloether 428	Averaged	0.40889	0.42259	0.46500	0.44706	0.46851	0.46425
Haloether 508	Averaged	0.48409	0.44494	0.39911	0.35542	0.40379	0.40442
Haloether 528	Averaged	0.64696	0.74645	0.73622	0.75569	0.79061	0.78817

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 11/17/2017 11/17/2017 Calibration Time(s): 09:29 11:16

LAB FILE ID

CAL1 = 111717.B\1117D05.D CAL1 = 111717HA.B\1117D05.D CAL2 = 111717HA.B\1117D06.D

CAL2 = 111717.B\1117D06.D CAL3 = 111717HA.B\1117D07.D CAL3 = 111717.B\1117D07.D

CAL4 = 111717.B\1117D08.D CAL4 = 111717HA.B\1117D08.D CAL5 = 111717HA.B\1117D09.D

CAL5 = 111717.B\1117D09.D CAL6 = 111717HA.B\1117D10.D CAL6 = 111717.B\1117D10.D

CAL7 = 111717HA.B\1117D11.D CAL7 = 111717.B\1117D11.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Halomar	Averaged	1.90959	2.06896	2.00410	1.98443	2.04450	2.01796
2-Hexanone	Averaged		0.46111	0.37777	0.33877	0.34228	0.32772
Isoflurane	Averaged	0.39633	0.46496	0.45780	0.45820	0.45162	0.45860
Methoxyflurane	Averaged	0.82431	0.90265	0.90822	0.90774	0.92189	0.88451
Methylene Chloride	Linear	1.70226	1.25764	0.94813	0.87601	0.88449	0.86107
4-Methyl-2-pentanone (MIBK)	Averaged		0.49146	0.50333	0.49145	0.52743	0.49697
Styrene	Averaged		1.42154	1.61204	1.65123	1.67428	1.63826
1,1,2,2-Tetrachloroethane	Averaged	0.53903	0.66112	0.64909	0.61335	0.62050	0.57970
Tetrachloroethene	Averaged	0.49124	0.52564	0.62176	0.63308	0.62213	0.62907
Toluene	Averaged	1.13019	1.18087	1.27474	1.26083	1.27459	1.22862
1,1,1-Trichloroethane	Averaged	1.29821	1.44440	1.46349	1.44484	1.46206	1.43113
1,1,2-Trichloroethane	Averaged	0.16986	0.20318	0.21739	0.21518	0.22533	0.21044
Trichloroethene	Averaged	0.25853	0.24861	0.32904	0.33995	0.34821	0.33360
Trichlorofluoromethane	Averaged	1.85028	1.69816	1.67102	1.80626	1.86307	1.86061
1,2,3-Trichloropropane	Averaged		0.15868	0.15461	0.14575	0.15536	0.15470
1,1,2-Trichlorotrifluoroethane	Averaged		0.81494	0.92678	0.93092	0.95808	0.96614
Vinyl chloride	Averaged	1.93273	1.91560	1.88945	1.92815	1.92469	1.87865
m&p-Xylene	Averaged		0.93682	1.02470	1.10070	1.10545	1.10774
o-Xylene	Averaged		0.82701	0.97998	1.02728	1.01458	1.02868
4-Bromofluorobenzene (S)	Averaged	0.99126	0.99033	1.00312	0.96899	0.97745	0.98379
Dibromofluoromethane (S)	Averaged	1.03526	1.04016	1.01833	1.01600	1.04208	1.06751
Toluene-d8 (S)	Averaged	1.13326	1.15107	1.17650	1.14022	1.14993	1.13368

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 11/17/2017 11/17/2017 Calibration Time(s): 09:29 11:16

LAB FILE ID

CAL1 =	111717.B\1117D05.D	CAL1 =	111717HA.B\1117D05.D	CAL2 =	111717HA.B\1117D06.D
CAL2 =	111717.B\1117D06.D	CAL3 =	111717HA.B\1117D07.D	CAL3 =	111717.B\1117D07.D
CAL4 =	111717.B\1117D08.D	CAL4 =	111717HA.B\1117D08.D	CAL5 =	111717HA.B\1117D09.D
CAL5 =	111717.B\1117D09.D	CAL6 =	111717HA.B\1117D10.D	CAL6 =	111717.B\1117D10.D
CAL7 =	111717HA.B\1117D11.D	CAL7 =	111717.B\1117D11.D		

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
Acetone	Linear	0.19151		0.99895	0.00513361	0.18901	
Acrolein	Linear	0.14258		0.99988	0.00217299	0.14153	
Acrylonitrile	Averaged	0.28244	5.93270			0.28850	
Benzene	Averaged	1.17122	5.26808			1.16747	
Bromodichloromethane	Averaged	0.41039	3.73142			0.39688	
Bromoform	Averaged	0.45091	12.82588			0.38727	
Bromomethane	Averaged	0.83680	11.49675			0.90179	
2-Butanone (MEK)	Averaged	0.32021	7.87027			0.33192	
Carbon disulfide	Averaged	2.62886	2.22927			2.63357	
Carbon tetrachloride	Averaged	0.44870	9.10966			0.41751	
Chlorobenzene	Averaged	1.76243	6.01134			1.65278	
Chloroethane	Averaged		13.91130			0.97764	
Chloroform	Averaged	1.69231	5.86042			1.66340	
Chloromethane	Averaged	1.34419	3.24493			1.34180	
Dibromochloromethane	Averaged	0.63536	7.87781			0.57279	
Dibromomethane	Averaged	0.18513	2.22029			0.18122	
1,1-Dichloroethane	Averaged	2.03997	7.92157			1.94042	
1,2-Dichloroethane	Averaged	0.44739	5.60011			0.42226	
1,1-Dichloroethene	Averaged	0.87738	5.29224			0.83512	
cis-1,2-Dichloroethene	Averaged	1.00642	1.64779			0.98110	
trans-1,2-Dichloroethene	Averaged	0.89133	2.74367			0.88383	
1,2-Dichloropropane	Averaged	0.36610	7.03218			0.35887	
cis-1,3-Dichloropropene	Averaged	0.48153	6.09002			0.46815	
trans-1,3-Dichloropropene	Averaged	0.41587	12.27906			0.38489	
Enflurane	Averaged	0.93712	7.91359			0.91641	
Ethylbenzene	Averaged	2.94769	6.45783			2.82567	
Haloether 229	Averaged	0.80645	10.81994			0.79317	
Haloether 406	Averaged	1.35138	2.69305			1.35621	
Haloether 421	Averaged	0.59768	5.11259			0.59721	
Haloether 427	Averaged	0.43895	8.10947			0.42130	
Haloether 428	Averaged	0.47179	5.51782			0.44973	
Haloether 508	Averaged	0.39824	9.86748			0.41286	
Haloether 528	Averaged	0.84889	8.18735			0.75900	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 11/17/2017 11/17/2017 Calibration Time(s): 09:29 11:16

LAB FILE ID

CAL1 =	111717.B\1117D05.D	CAL1 =	111717HA.B\1117D05.D	CAL2 =	111717HA.B\1117D06.D
CAL2 =	111717.B\1117D06.D	CAL3 =	111717HA.B\1117D07.D	CAL3 =	111717.B\1117D07.D
CAL4 =	111717.B\1117D08.D	CAL4 =	111717HA.B\1117D08.D	CAL5 =	111717HA.B\1117D09.D
CAL5 =	111717.B\1117D09.D	CAL6 =	111717HA.B\1117D10.D	CAL6 =	111717.B\1117D10.D
CAL7 =	111717HA.B\1117D11.D	CAL7 =	111717.B\1117D11.D		

COMPOUND	CURVE TYPE	CAL7	%RSD	R2	A1	A2	A3
Halomar	Averaged	2.02024	2.53624			2.00711	
2-Hexanone	Averaged	0.33835	13.83413			0.36433	
Isoflurane	Averaged	0.44594	5.22785			0.44764	
Methoxyflurane	Averaged	0.90876	3.65549			0.89401	
Methylene Chloride	Linear	0.85738		0.99996	0.01182632	0.85534	
4-Methyl-2-pentanone (MIBK)	Averaged	0.51285	2.79562			0.50391	
Styrene	Averaged	1.70595	6.24791			1.61722	
1,1,2,2-Tetrachloroethane	Averaged	0.56835	7.31696			0.60445	
Tetrachloroethene	Averaged	0.64031	10.11004			0.59475	
Toluene	Averaged	1.24996	4.42114			1.22854	
1,1,1-Trichloroethane	Averaged	1.40203	4.07827			1.42088	
1,1,2-Trichloroethane	Averaged	0.22565	9.17516			0.20958	
Trichloroethene	Averaged	0.35441	13.79769			0.31605	
Trichlorofluoromethane	Averaged	1.86565	4.61509			1.80215	
1,2,3-Trichloropropane	Averaged	0.15199	2.84401			0.15351	
1,1,2-Trichlorotrifluoroethane	Averaged	0.94539	5.99732			0.92371	
Vinyl chloride	Averaged	1.75480	3.31586			1.88915	
m&p-Xylene	Averaged	1.20665	8.42731			1.08034	
o-Xylene	Averaged	1.05540	8.39153			0.98882	
4-Bromofluorobenzene (S)	Averaged	0.95200	1.65545			0.97934	
Dibromofluoromethane (S)	Averaged	1.05544	1.65214			1.03926	
Toluene-d8 (S)	Averaged	1.13069	1.38253			1.14700	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-1

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 12/04/2017 12/04/2017 Calibration Time(s): 10:58 13:02

LAB FILE ID

CAL1 = 120417.B\1204D09.D CAL2 = 120417.B\1204D10.D CAL3 = 120417.B\1204D11.D

CAL4 = 120417.B\1204D12.D CAL5 = 120417.B\1204D13.D CAL6 = 120417.B\1204D14.D

CAL7 = 120417.B\1204D15.D CAL8 = 120417.B\1204D08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Linear		0.50811	0.30411	0.25016	0.24535	0.23927
Acrolein	Averaged		0.14241	0.22558	0.17944	0.18584	0.17974
Acrylonitrile	Averaged		0.38903	0.37447	0.37659	0.36249	0.37132
Benzene	Averaged	0.93098	1.12025	1.10774	1.20013	1.19371	1.18390
Bromodichloromethane	Averaged	0.28985	0.36110	0.35534	0.36812	0.38237	0.37961
Bromoform	Linear	0.20734	0.30682	0.33399	0.39786	0.41677	0.45973
Bromomethane	Linear	1.16062	0.89923	0.78179	0.72936	0.74712	0.69609
2-Butanone (MEK)	Averaged		0.55521	0.40921	0.43494	0.41936	0.42839
Carbon disulfide	Averaged		2.70838	2.63924	2.98099	2.90727	2.81823
Carbon tetrachloride	Averaged	0.30568	0.33576	0.39973	0.41589	0.42254	0.43641
Chlorobenzene	Averaged	1.37542	1.60718	1.72531	1.91115	1.79128	1.87428
Chloroethane	Averaged	0.98965	0.80627	0.75288	0.81767	0.78288	0.75258
Chloroform	Averaged	1.31983	1.32689	1.59954	1.79005	1.78031	1.74358
Chloromethane	Averaged	2.13792	1.93281	1.89604	1.94835	1.91799	1.86582
Dibromochloromethane	Linear	0.38660	0.34804	0.51440	0.58162	0.59357	0.63915
Dibromomethane	Averaged		0.17669	0.17047	0.17748	0.17293	0.18183
1,1-Dichloroethane	Averaged	1.97695	1.87765	2.15158	2.37131	2.33587	2.26078
1,2-Dichloroethane	Averaged	0.39634	0.43429	0.40168	0.42669	0.42159	0.42582
1,1-Dichloroethene	Averaged	0.66977	0.78974	0.83964	0.95600	0.91830	0.90778
cis-1,2-Dichloroethene	Averaged		0.97064	1.02085	1.13292	1.11940	1.07851
trans-1,2-Dichloroethene	Averaged	0.93786	0.83559	0.91555	0.99864	0.96335	0.95010
1,2-Dichloropropane	Averaged	0.32123	0.39451	0.38655	0.39689	0.38981	0.40108
cis-1,3-Dichloropropene	Averaged	0.32472	0.36490	0.37727	0.45752	0.45683	0.47397
trans-1,3-Dichloropropene	Averaged	0.25302	0.33842	0.32894	0.36155	0.37649	0.39214
Ethylbenzene	Averaged	2.65486	2.80382	2.80084	3.17561	2.97262	3.07411
2-Hexanone	Averaged		0.44997	0.38614	0.44092	0.40800	0.44430
Methylene Chloride	Linear	2.33537	1.34731	0.95136	1.00300	0.93942	0.91834
4-Methyl-2-pentanone (MIBK)	Averaged		0.55256	0.59104	0.63603	0.62800	0.67625
Styrene	Averaged		1.40059	1.63970	1.77496	1.79425	1.82286
1,1,2,2-Tetrachloroethane	Linear	0.34437	0.42700	0.57633	0.54161	0.53755	0.53927
Tetrachloroethene	Averaged	0.53201	0.56948	0.68311	0.73134	0.68637	0.72149
Toluene	Averaged	0.87242	1.13556	1.20354	1.29530	1.26442	1.23872
1,1,1-Trichloroethane	Averaged	1.28775	1.26006	1.48170	1.55774	1.51577	1.45836
1,1,2-Trichloroethane	Averaged	0.19893	0.22637	0.20746	0.22223	0.22132	0.22542
Trichloroethene	Averaged	0.28234	0.32503	0.34136	0.37024	0.35674	0.36292

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 12/04/2017 12/04/2017 Calibration Time(s): 10:58 13:02

LAB FILE ID

CAL1 = 120417.B\1204D09.D CAL2 = 120417.B\1204D10.D CAL3 = 120417.B\1204D11.D

CAL4 = 120417.B\1204D12.D CAL5 = 120417.B\1204D13.D CAL6 = 120417.B\1204D14.D

CAL7 = 120417.B\1204D15.D CAL8 = 120417.B\1204D08.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Trichlorofluoromethane	Averaged	1.53024	1.46124	1.40134	1.47382	1.47156	1.45192
1,2,3-Trichloropropane	Averaged		0.13586	0.14412	0.14514	0.14319	0.14299
1,1,2-Trichlorotrifluoroethane	Averaged		0.77251	0.89532	1.07182	1.06056	1.01442
Vinyl chloride	Averaged	1.99225	1.92461	1.70548	1.86662	1.83479	1.75037
m&p-Xylene	Averaged		0.97213	1.06811	1.18915	1.15638	1.18502
o-Xylene	Averaged		0.89918	0.96261	1.08236	1.09241	1.13205
4-Bromofluorobenzene (S)	Averaged	1.00481	1.00240	1.03764	0.95469	0.96706	0.97393
Dibromofluoromethane (S)	Averaged	1.12930	1.08064	1.10980	1.09664	1.09448	1.08250
Toluene-d8 (S)	Averaged	1.12577	1.13381	1.13410	1.10691	1.10560	1.11482

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 12/04/2017 12/04/2017 Calibration Time(s): 10:58 13:02

LAB FILE ID

CAL1 = 120417.B\1204D09.D CAL2 = 120417.B\1204D10.D CAL3 = 120417.B\1204D11.D

CAL4 = 120417.B\1204D12.D CAL5 = 120417.B\1204D13.D CAL6 = 120417.B\1204D14.D

CAL7 = 120417.B\1204D15.D CAL8 = 120417.B\1204D08.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Linear	0.24979	
Acrolein	Averaged	0.19065	
Acrylonitrile	Averaged	0.38276	
Benzene	Averaged	1.19905	
Bromodichloromethane	Averaged	0.39886	
Bromoform	Linear	0.48242	
Bromomethane	Linear	0.78105	
2-Butanone (MEK)	Averaged	0.42153	
Carbon disulfide	Averaged	2.96255	
Carbon tetrachloride	Averaged	0.45541	
Chlorobenzene	Averaged	1.92322	
Chloroethane	Averaged		
Chloroform	Averaged	1.82631	
Chloromethane	Averaged	1.95501	
Dibromochloromethane	Linear	0.66913	
Dibromomethane	Averaged	0.18226	
1,1-Dichloroethane	Averaged	2.37877	
1,2-Dichloroethane	Averaged	0.43293	
1,1-Dichloroethene	Averaged	0.94881	
cis-1,2-Dichloroethene	Averaged	1.13292	
trans-1,2-Dichloroethene	Averaged	0.98740	
1,2-Dichloropropane	Averaged	0.40935	
cis-1,3-Dichloropropene	Averaged	0.47513	
trans-1,3-Dichloropropene	Averaged	0.39504	
Ethylbenzene	Averaged	3.10061	
2-Hexanone	Averaged	0.43639	
Methylene Chloride	Linear	0.96280	
4-Methyl-2-pentanone (MIBK)	Averaged	0.64197	
Styrene	Averaged	1.83111	
1,1,2,2-Tetrachloroethane	Linear	0.55385	
Tetrachloroethene	Averaged	0.71794	
Toluene	Averaged	1.28954	
1,1,1-Trichloroethane	Averaged	1.54111	
1,1,2-Trichloroethane	Averaged	0.22835	
Trichloroethene	Averaged	0.37007	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 12/04/2017 12/04/2017 Calibration Time(s): 10:58 13:02

LAB FILE ID

CAL1 = 120417.B\1204D09.D CAL2 = 120417.B\1204D10.D CAL3 = 120417.B\1204D11.D

CAL4 = 120417.B\1204D12.D CAL5 = 120417.B\1204D13.D CAL6 = 120417.B\1204D14.D

CAL7 = 120417.B\1204D15.D CAL8 = 120417.B\1204D08.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Trichlorofluoromethane	Averaged	1.60297	
1,2,3-Trichloropropane	Averaged	0.15134	
1,1,2-Trichlorotrifluoroethane	Averaged	1.04093	
Vinyl chloride	Averaged	1.82542	
m&p-Xylene	Averaged	1.23167	
o-Xylene	Averaged	1.13598	
4-Bromofluorobenzene (S)	Averaged	0.98128	0.98832
Dibromofluoromethane (S)	Averaged	1.08914	1.12356
Toluene-d8 (S)	Averaged	1.10077	1.12808

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 12/04/2017 12/04/2017 Calibration Time(s): 10:58 13:02

LAB FILE ID

CAL1 = 120417.B\1204D09.D CAL2 = 120417.B\1204D10.D CAL3 = 120417.B\1204D11.D

CAL4 = 120417.B\1204D12.D CAL5 = 120417.B\1204D13.D CAL6 = 120417.B\1204D14.D

CAL7 = 120417.B\1204D15.D CAL8 = 120417.B\1204D08.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Linear		0.99942	0.00046617	0.24746	
Acrolein	Averaged	14.47559			0.18394	
Acrylonitrile	Averaged	2.44439			0.37611	
Benzene	Averaged	8.57890			1.13368	
Bromodichloromethane	Averaged	9.67779			0.36218	
Bromoform	Linear		0.99875	-0.0242845	0.48296	
Bromomethane	Linear		0.99717	-0.0190744	0.76979	
2-Butanone (MEK)	Averaged	12.31955			0.44477	
Carbon disulfide	Averaged	4.92216			2.83611	
Carbon tetrachloride	Averaged	13.85865			0.39592	
Chlorobenzene	Averaged	11.32833			1.74398	
Chloroethane	Averaged	10.85841			0.81699	
Chloroform	Averaged	13.48230			1.62664	
Chloromethane	Averaged	4.52083			1.95056	
Dibromochloromethane	Linear		0.99908	-0.0277996	0.66904	
Dibromomethane	Averaged	2.65737			0.17694	
1,1-Dichloroethane	Averaged	9.10267			2.19327	
1,2-Dichloroethane	Averaged	3.56983			0.41990	
1,1-Dichloroethene	Averaged	12.01816			0.86144	
cis-1,2-Dichloroethene	Averaged	6.23679			1.07587	
trans-1,2-Dichloroethene	Averaged	5.79109			0.94121	
1,2-Dichloropropane	Averaged	7.61332			0.38563	
cis-1,3-Dichloropropene	Averaged	14.67480			0.41862	
trans-1,3-Dichloropropene	Averaged	14.12892			0.34937	
Ethylbenzene	Averaged	6.50592			2.94035	
2-Hexanone	Averaged	5.85741			0.42762	
Methylene Chloride	Linear		0.99940	-0.0015569	0.95416	
4-Methyl-2-pentanone (MIBK)	Averaged	6.96343			0.62097	
Styrene	Averaged	9.76114			1.71058	
1,1,2,2-Tetrachloroethane	Linear		0.99982	-0.0059168	0.55235	
Tetrachloroethene	Averaged	11.99586			0.66311	
Toluene	Averaged	12.54683			1.18564	
1,1,1-Trichloroethane	Averaged	8.36237			1.44321	
1,1,2-Trichloroethane	Averaged	5.05915			0.21858	
Trichloroethene	Averaged	9.23322			0.34410	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans Instrument ID: 20MSVD GC Column: Col 1 SDG No.: 2066645

Calibration Date(s): 12/04/2017 12/04/2017 Calibration Time(s): 10:58 13:02

LAB FILE ID

CAL1 = 120417.B\1204D09.D CAL2 = 120417.B\1204D10.D CAL3 = 120417.B\1204D11.D

CAL4 = 120417.B\1204D12.D CAL5 = 120417.B\1204D13.D CAL6 = 120417.B\1204D14.D

CAL7 = 120417.B\1204D15.D CAL8 = 120417.B\1204D08.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Trichlorofluoromethane	Averaged	4.34102			1.48473	
1,2,3-Trichloropropane	Averaged	3.44611			0.14377	
1,1,2-Trichlorotrifluoroethane	Averaged	12.11893			0.97593	
Vinyl chloride	Averaged	5.30581			1.84279	
m&p-Xylene	Averaged	8.48119			1.13374	
o-Xylene	Averaged	9.26131			1.05077	
4-Bromofluorobenzene (S)	Averaged	2.63186			0.98876	
Dibromofluoromethane (S)	Averaged	1.66317			1.10076	
Toluene-d8 (S)	Averaged	1.19470			1.11873	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d05.d
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Inj Date : 17-NOV-2017 09:29
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal1,54397:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 09:29 Cal File: 1117d05.d
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.708	1.703	(0.257)	3729	0.50000	0.466
2 Chloromethane	50	1.889	1.894	(0.284)	5456	0.50000	0.490
3 Vinyl chloride	62	1.990	1.990	(0.299)	8017	0.50000	0.512
4 Bromomethane	94	2.338	2.338	(0.352)	4143	0.50000	0.554
5 Chloroethane	64	2.489	2.489	(0.374)	4086	0.50000	2.79(MH)
6 Trichlorofluoromethane	101	2.655	2.650	(0.399)	7675	0.50000	0.513(MH)
7 1,1-Dichloroethene	96	3.250	3.244	(0.489)	3111	0.50000	0.996(M)
8 Carbon disulfide	76	3.275	3.275	(0.492)	12045	0.50000	0.551
9 1,1,2-Trichlorotrifluoroethane	101	3.320	3.315	(0.499)	3308	0.50000	0.474(M)
10 Iodomethane	142	3.426	3.426	(0.515)	5911	0.50000	0.444
11 Acrolein	56	3.723	3.718	(0.560)	865	0.50000	0.680
12 Allyl chloride	41	3.899	3.894	(0.586)	7232	0.50000	0.534
13 Methylene Chloride	84	4.046	4.051	(0.608)	7061	0.50000	0.304(M)
14 Acetone	43	4.156	4.146	(0.625)	6088	0.50000	2.52
15 trans-1,2-Dichloroethene	96	4.282	4.277	(0.644)	3679	0.50000	0.553
16 Methyl Acetate	74	4.318	4.318	(0.649)	200	0.50000	0.429(M)
17 n-Hexane	57	4.383	4.388	(0.659)	6153	0.50000	0.430
18 Methyl-tert-butyl ether	73	4.459	4.449	(0.670)	6539	0.50000	0.455
19 Acetonitrile	41	4.766	4.766	(0.717)	2640	5.00000	4.01
20 Chloroprene	53	5.048	5.048	(0.759)	7142	0.50000	0.507
21 1,1-Dichloroethane	63	5.068	5.073	(0.762)	7091	0.50000	0.440
22 Acrylonitrile	53	5.164	5.144	(0.777)	1621	0.50000	0.747(M)

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	23 Vinyl acetate	43	5.396	5.396	(0.811)	14807	0.50000	0.444	
	24 cis-1,2-Dichloroethene	96	5.698	5.688	(0.857)	4033	0.50000	0.496	
	25 2,2-Dichloropropane	77	5.814	5.804	(0.874)	3917	0.50000	0.421(M)	
	26 Cyclohexane	84	5.894	5.889	(0.886)	4472	0.50000	0.441	
	27 Bromochloromethane	128	5.884	5.894	(0.885)	2012	0.50000	0.555	
	28 Chloroform	83	5.985	5.985	(0.900)	6015	0.50000	0.436	
	29 Carbon tetrachloride	117	6.116	6.111	(0.856)	4288	0.50000	0.414	
	30 Tetrahydrofuran	42	Compound Not Detected.						(D
	31 1,1,1-Trichloroethane	97	6.202	6.187	(0.933)	5385	0.50000	0.457	
$	32 Dibromofluoromethane (S)	113	6.171	6.166	(0.928)	429428	50.0000	49.8	
	33 1,1-Dichloropropene	75	6.313	6.312	(0.884)	5243	0.50000	0.482	
	34 2-Butanone (MEK)	43	6.318	6.312	(0.950)	2607	0.50000	0.598	
	35 Benzene	78	6.564	6.559	(0.919)	12900	0.50000	0.445	
	36 Propionitrile	54	6.595	6.600	(0.992)	3983	5.00000	4.80(M)	
	37 Methacrylonitrile	41	6.615	6.620	(0.995)	15716	5.00000	4.00	
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	414802	50.0000		
	39 1,2-Dichloroethane	62	6.751	6.756	(0.945)	4885	0.50000	0.466	
	40 Isobutanol	43	6.786	6.786	(1.020)	2910	10.5000	12.5	
	41 Methylcyclohexane	83	7.088	7.098	(0.992)	4440	0.50000	0.388	
	42 Trichloroethene	130	7.103	7.108	(0.994)	3210	0.50000	0.409	
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1241645	50.0000		
	44 Dibromomethane	93	7.491	7.491	(1.049)	1786	0.50000	0.397	
	45 1,2-Dichloropropane	63	7.597	7.592	(1.063)	3761	0.50000	0.422	
	46 Bromodichloromethane	83	7.653	7.647	(1.071)	4772	0.50000	0.484	
	47 Methyl methacrylate	41	7.804	7.809	(1.092)	5340	1.00000	0.858	
	48 1,4-Dioxane (p-Dioxane)	88	7.844	7.844	(1.098)	246	10.0000	6.80	
	49 2-Chloroethyl vinyl ether	63	8.217	8.227	(1.150)	3824	1.00000	0.833	
	50 cis-1,3-Dichloropropene	75	8.287	8.287	(1.160)	5426	0.50000	0.467	
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1407105	50.0000	49.4	
	52 Toluene	91	8.539	8.539	(1.195)	14033	0.50000	0.460	
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	2847	0.50000	0.413	
	54 4-Methyl-2-Pentanone	43	8.907	8.902	(0.910)	3672	0.50000	0.629	
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	3549	0.50000	0.371	
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	2582	0.50000	0.416	
	57 1,1,2-Trichloroethane	97	9.063	9.068	(1.269)	2109	0.50000	0.405	
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	3072	0.50000	0.463	
	59 1,3-Dichloropropane	76	9.295	9.300	(0.950)	4297	0.50000	0.494	
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	2342	0.50000	0.417	
	61 2-Hexanone	43	9.582	9.577	(0.979)	2378	0.50000	0.563	
*	62 Chlorobenzene-d5 (IS)	82	9.789	9.788	(1.000)	579548	50.0000		
	63 Chlorobenzene	112	9.799	9.799	(1.001)	8637	0.50000	0.451	
	64 Ethylbenzene	91	9.814	9.814	(1.003)	14579	0.50000	0.445	
	65 1,1,1,2-Tetrachloroethane	131	9.839	9.844	(1.005)	2882	0.50000	0.402	
	66 m&p-Xylene	106	9.919	9.914	(1.013)	9987	1.00000	0.798	
	67 o-Xylene	106	10.207	10.207	(1.043)	4110	0.50000	0.358	
	68 Styrene	104	10.237	10.242	(1.046)	7611	0.50000	0.406	
	69 Bromoform	173	10.262	10.267	(1.048)	1886	0.50000	0.420	
	70 Isopropylbenzene (Cumene)	105	10.408	10.408	(0.926)	12302	0.50000	0.425	
$	71 4-Bromofluorobenzene (S)	176	10.584	10.589	(0.942)	499278	50.0000	50.6	
	72 trans-1,4-Dichloro-2-butene	88	10.630	10.625	(0.946)	1206	1.00000	(M)	
	73 Bromobenzene	156	10.655	10.655	(0.948)	3442	0.50000	0.434	
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	16140	0.50000	0.465	
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.705	(0.952)	2715	0.50000	0.446	
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	10003	0.50000	0.460	

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	8933	0.50000	0.403
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	1021	0.50000	0.660
79 4-Chlorotoluene	91	10.857	10.856	(0.966)	8106	0.50000	0.410
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	4743	0.50000	0.378
81 Pentachloroethane	167	10.982	10.982	(0.978)	1783	0.50000	0.370(M)
82 1,2,4-Trimethylbenzene	105	10.998	10.998	(0.979)	10021	0.50000	0.468
83 sec-Butylbenzene	105	11.063	11.063	(0.985)	11031	0.50000	0.416
84 p-Isopropyltoluene	119	11.129	11.134	(0.991)	9688	0.50000	0.453
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	5636	0.50000	0.463
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	503682	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	6025	0.50000	0.486
88 n-Butylbenzene	91	11.365	11.370	(1.012)	8474	0.50000	0.419
89 1,2-Dichlorobenzene	146	11.476	11.481	(1.022)	4941	0.50000	0.463
90 1,2-Dibromo-3-chloropropane	157	11.922	11.927	(1.061)	669	0.50000	0.441
91 Hexachloro-1,3-butadiene	225	12.287	12.287	(1.094)	1802	0.50000	0.544
92 1,2,4-Trichlorobenzene	180	12.322	12.327	(1.097)	2742	0.50000	0.526
93 Naphthalene	128	12.539	12.549	(1.116)	4507	0.50000	0.440
94 1,2,3-Trichlorobenzene	180	12.665	12.675	(1.127)	1520	0.50000	0.392

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.
D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d05.d
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Inj Date : 17-NOV-2017 09:29
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal1,54436:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:14 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 09:29 Cal File: 1117d05.d
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

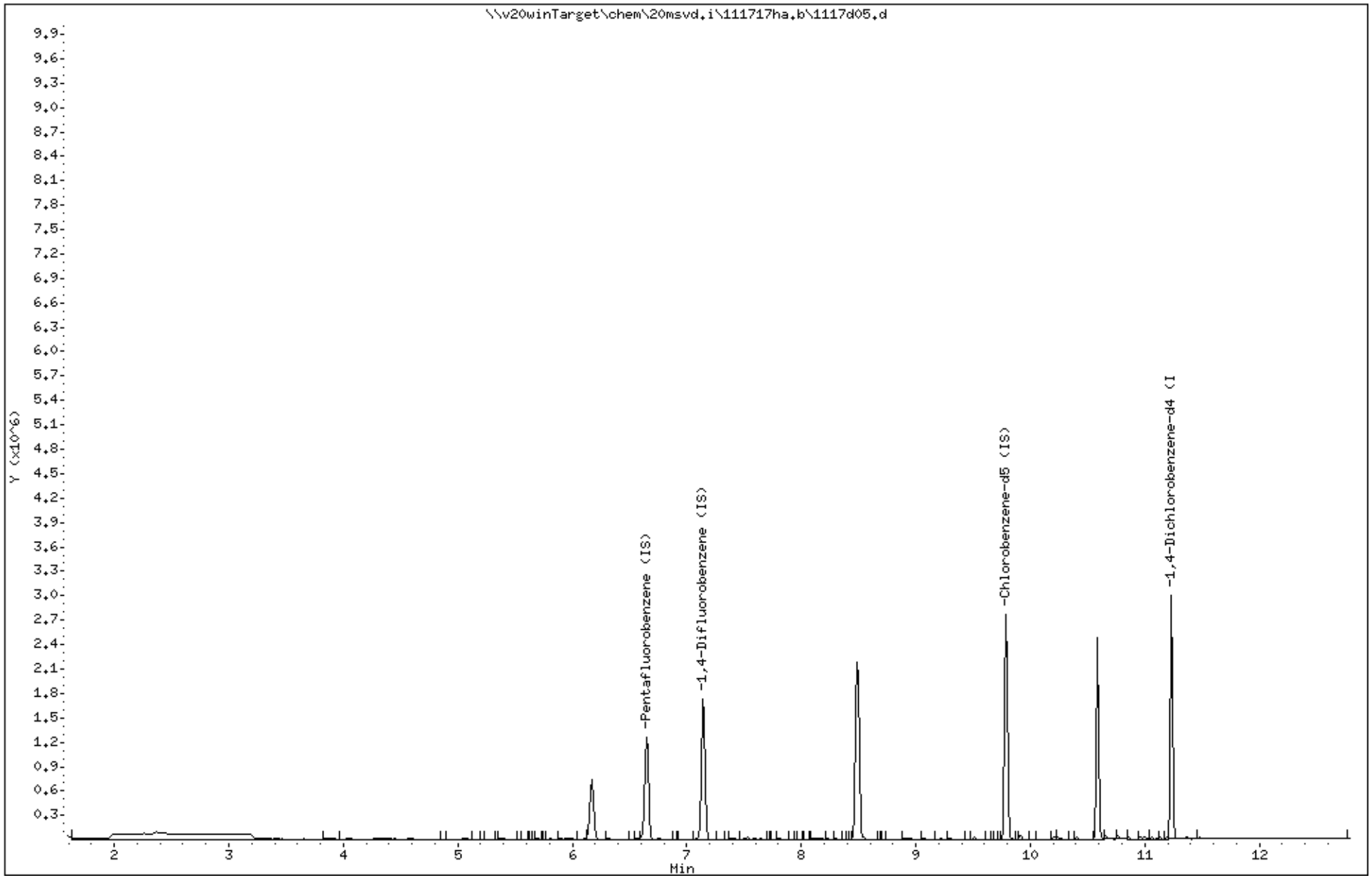
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.242	2.237	(0.337)	5762	1.00000	0.876
2 Haloether 406	85	3.874	3.879	(0.583)	10773	1.00000	0.958(M)
3 Isoflurane	117	4.333	4.332	(0.652)	3288	1.00000	0.885(M)
4 Haloether 508	97	4.363	4.357	(0.656)	4016	1.00000	1.19(M)
5 Enflurane	117	4.595	4.584	(0.691)	6326	1.00000	0.832(M)
6 Halomar	81	5.360	5.360	(0.806)	15842	1.00000	0.951
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	414802	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.143	(1.000)	1241645	50.0000	
7 Haloether 421	67	7.411	7.405	(1.037)	13195	1.00000	0.890
8 Haloether 427	151	7.532	7.526	(1.054)	8560	1.00000	0.818
11 Haloether 428	117	8.111	8.111	(1.135)	10154	1.00000	0.909
12 Methoxyflurane	81	8.166	8.161	(1.143)	20470	1.00000	0.922
13 Haloether 528	211	9.511	9.516	(1.331)	16066	1.00000	0.852
* 14 Chlorobenzene-d5 (IS)	82	9.789	9.788	(1.000)	579548	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.239	(1.000)	504289	50.0000	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\v20winTarget\chem\20msvd.i\111717ha.b\1117d05.d
Date : 17-NOV-2017 09:29
Client ID: CAL1
Instrument: 20msvd.i
Sample Info: CAL1,54436:1
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



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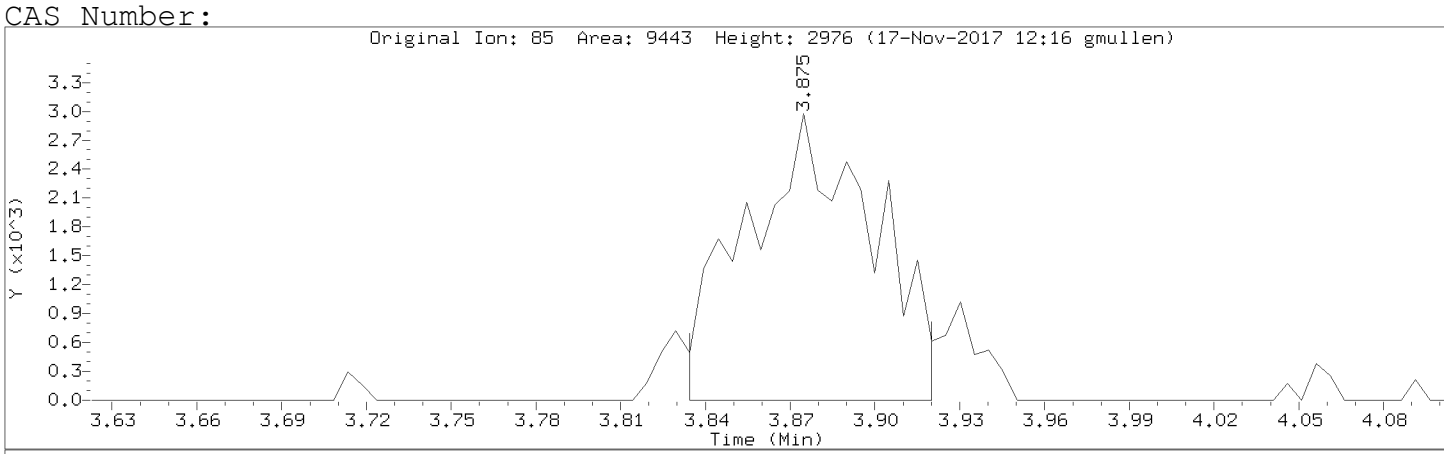
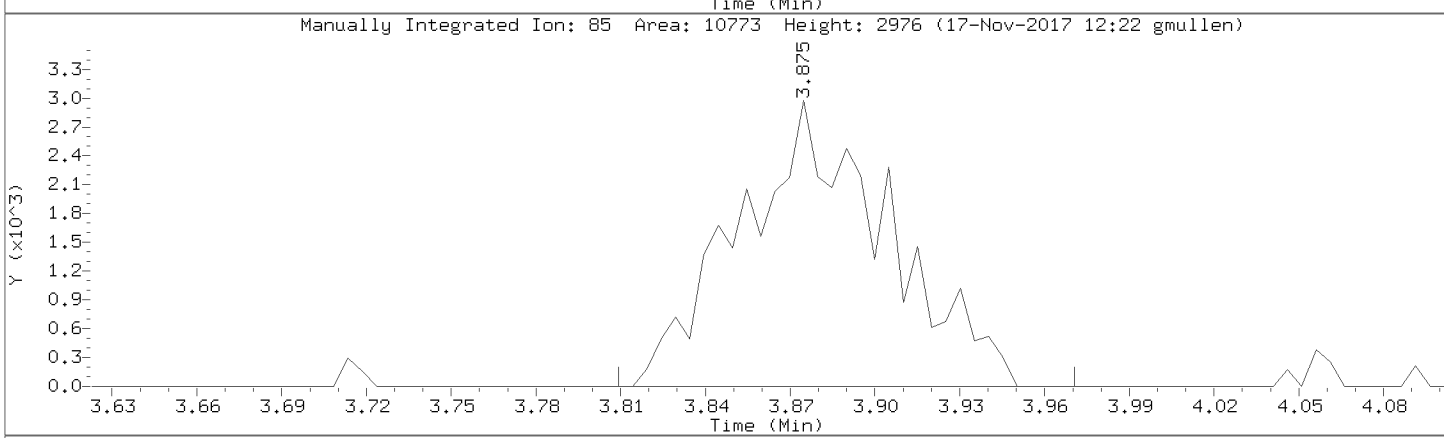
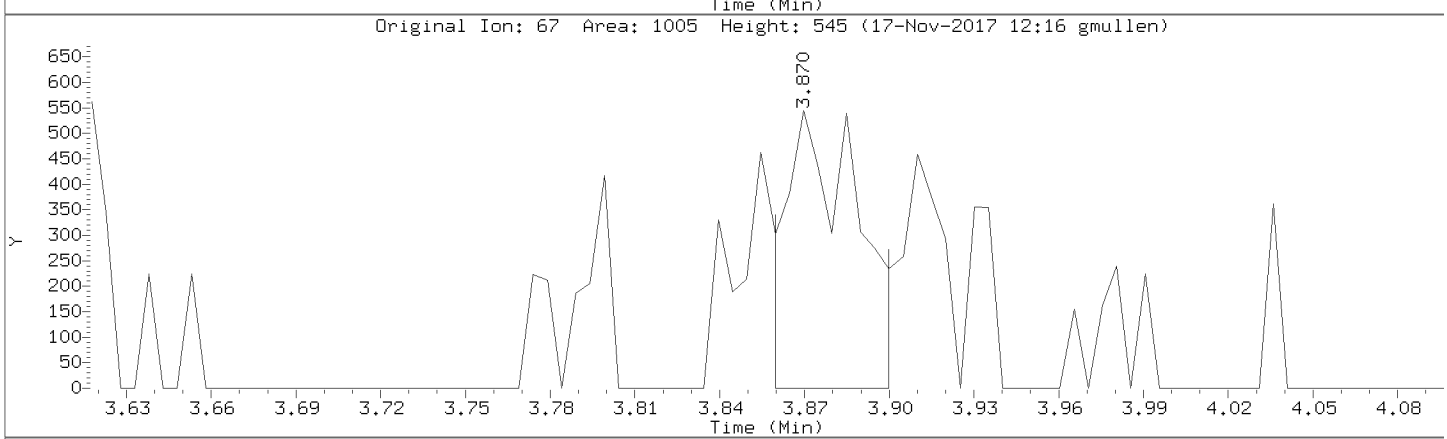
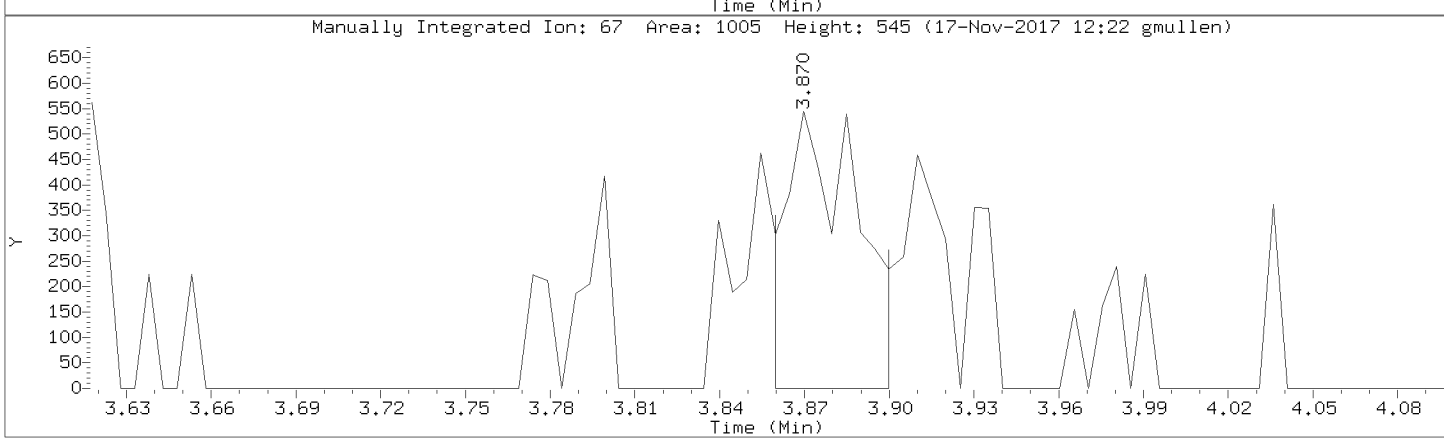
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Haloether 406 Review Code: LT
CAS Number:









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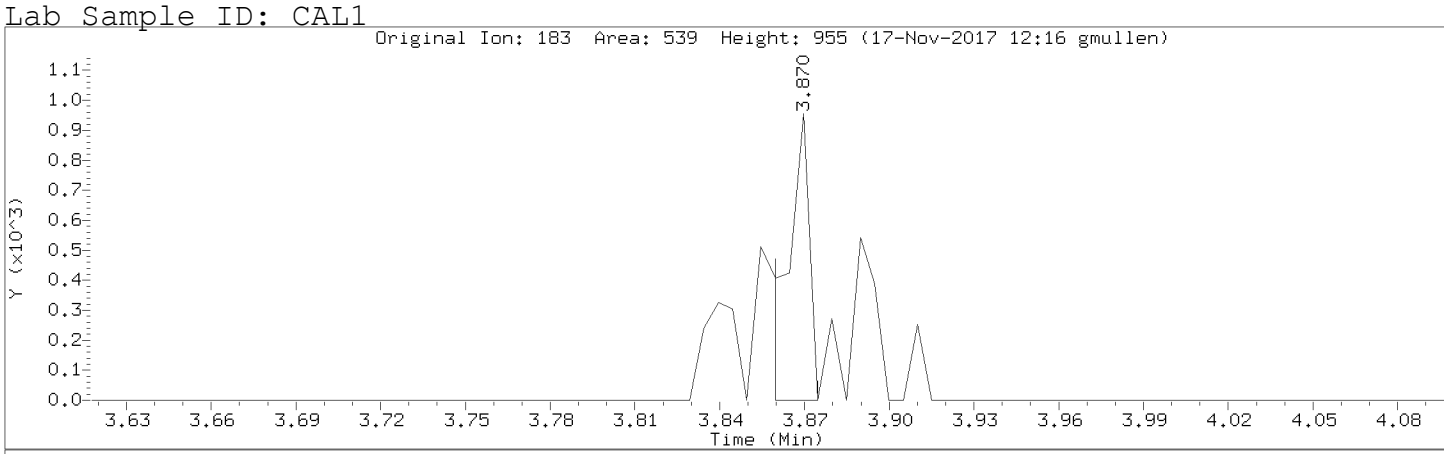
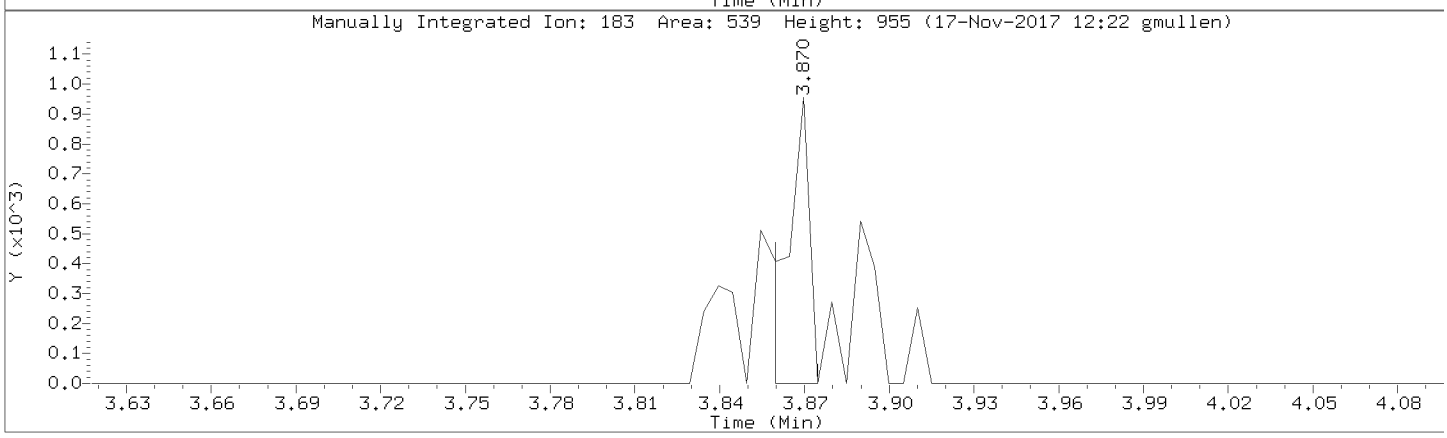
Instrument: 20msvd.i
Lab Sample ID: CAL1





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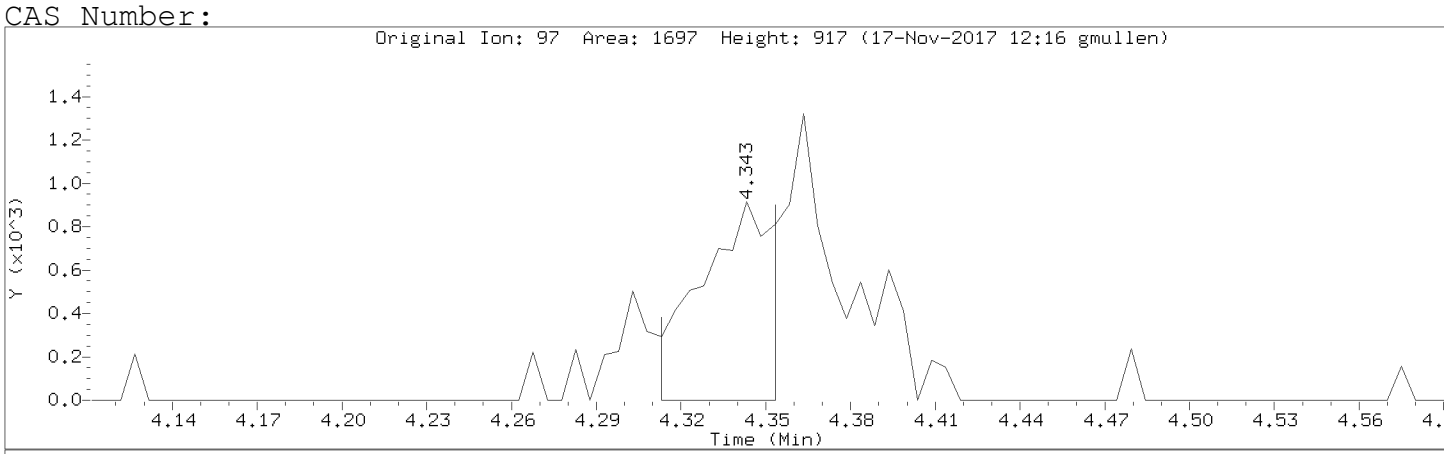
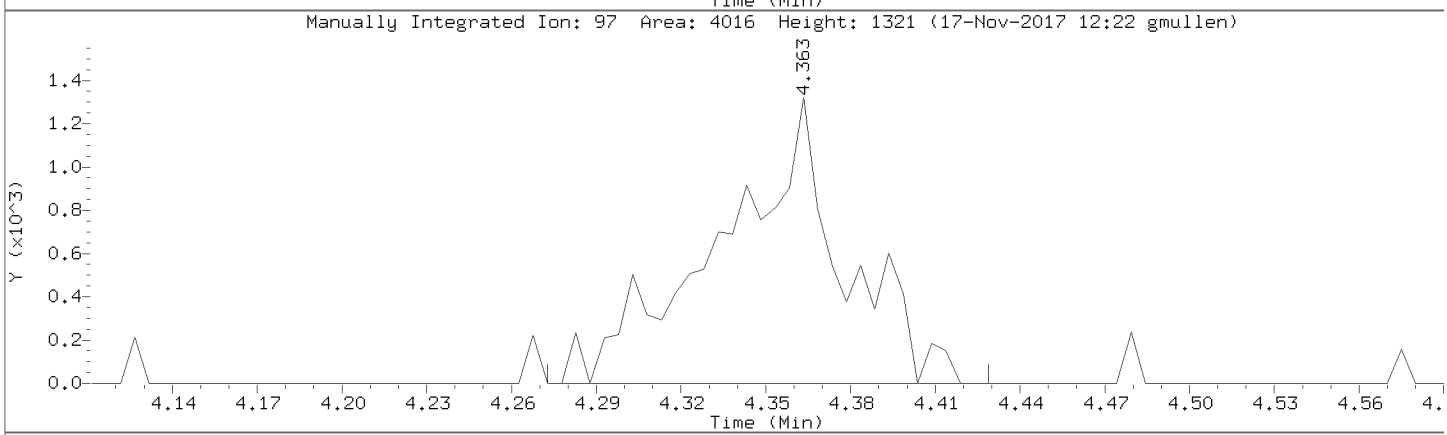
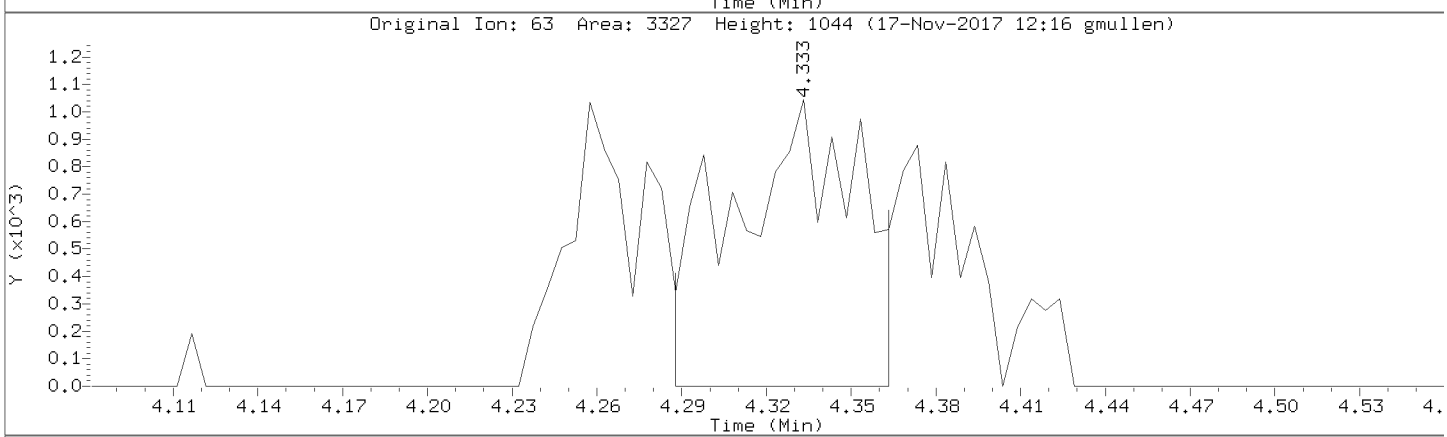
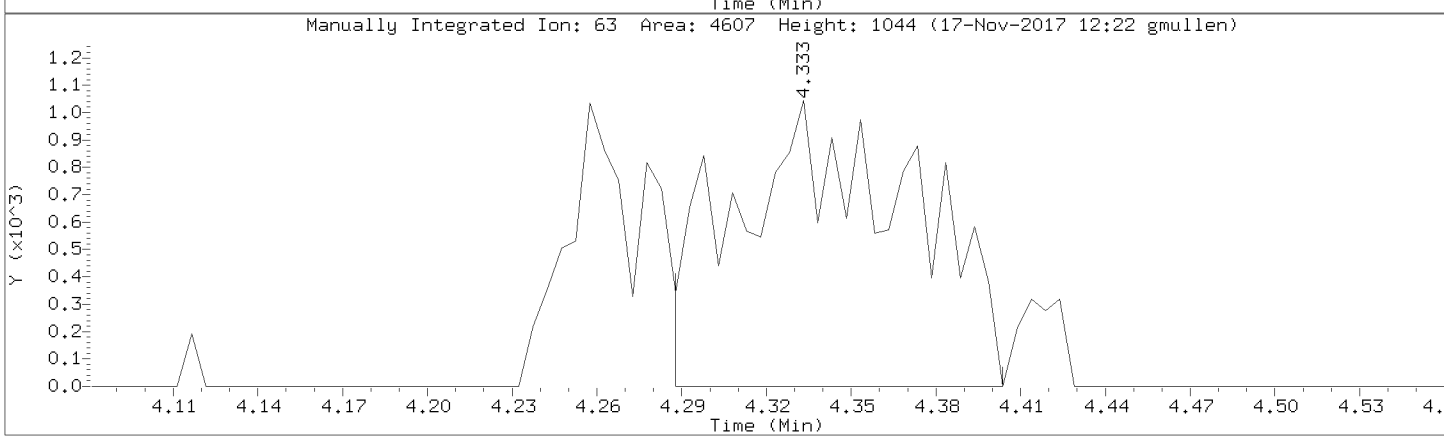
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Haloether 508 Review Code: LT
CAS Number:









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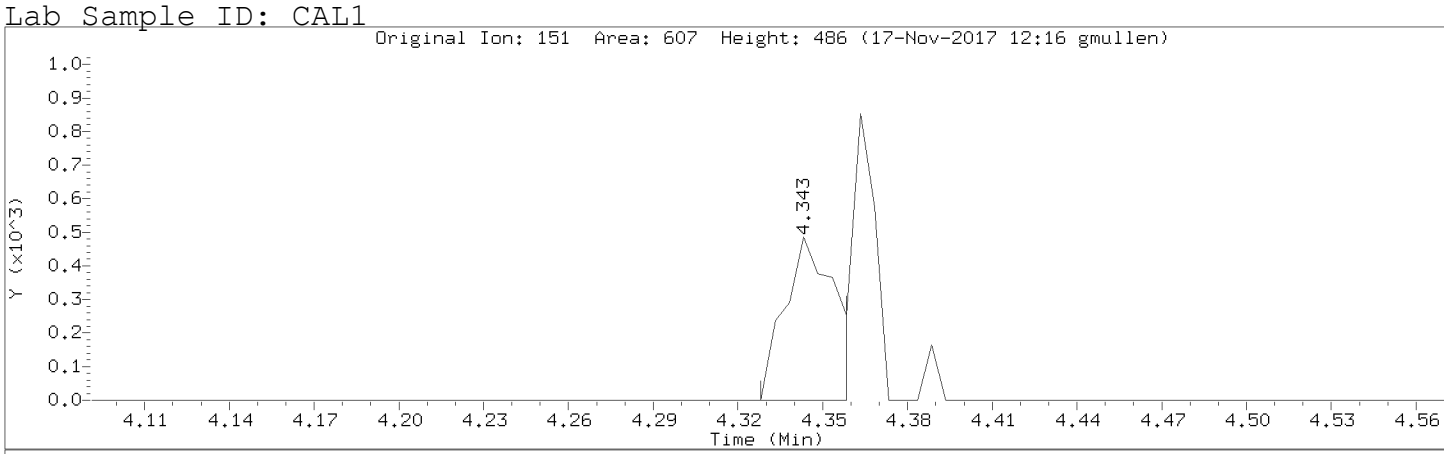
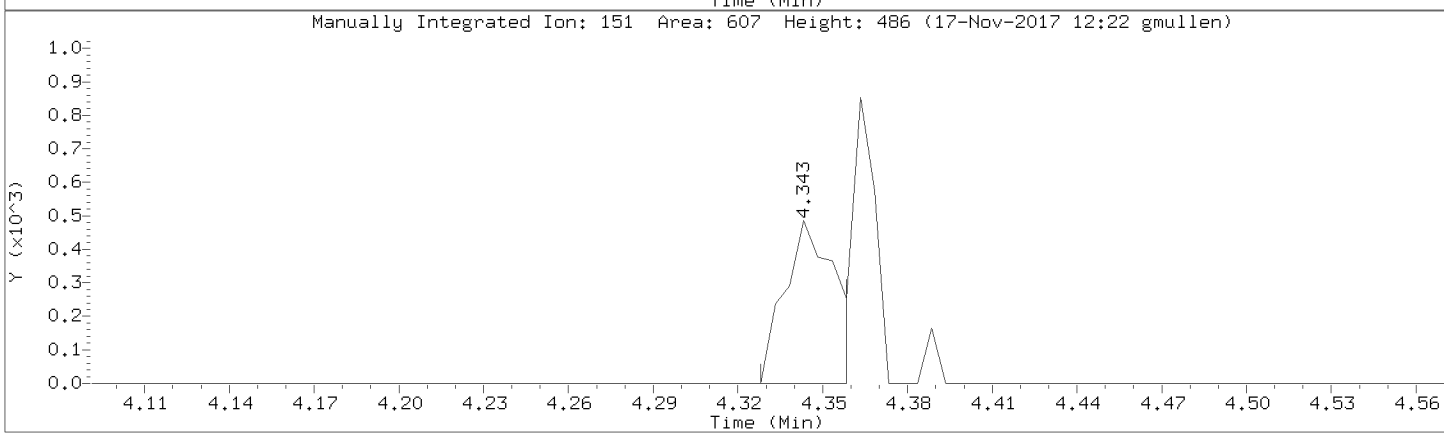
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1





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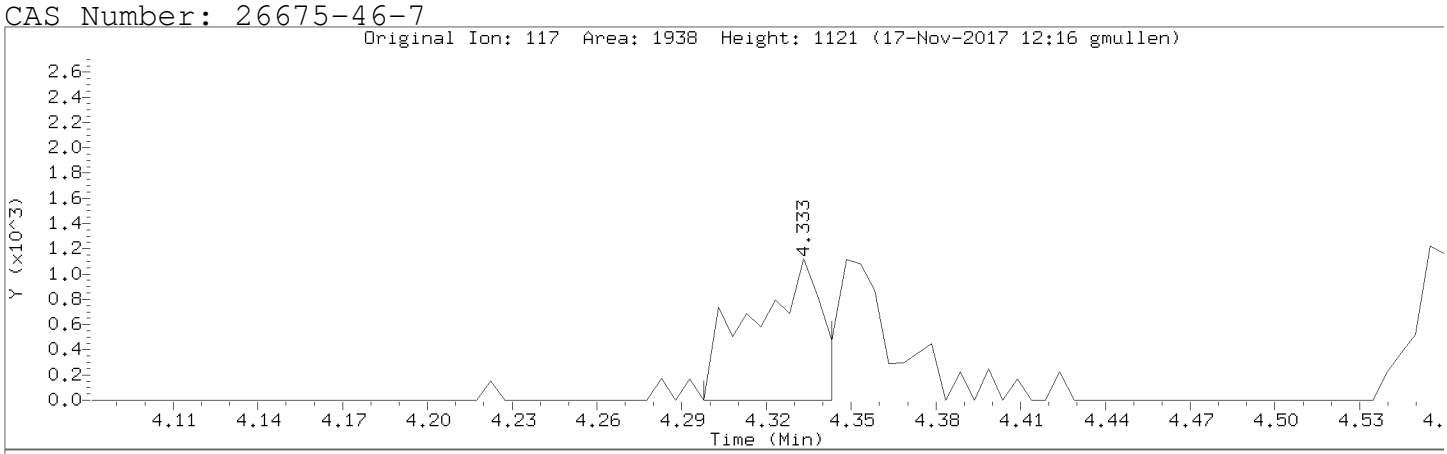
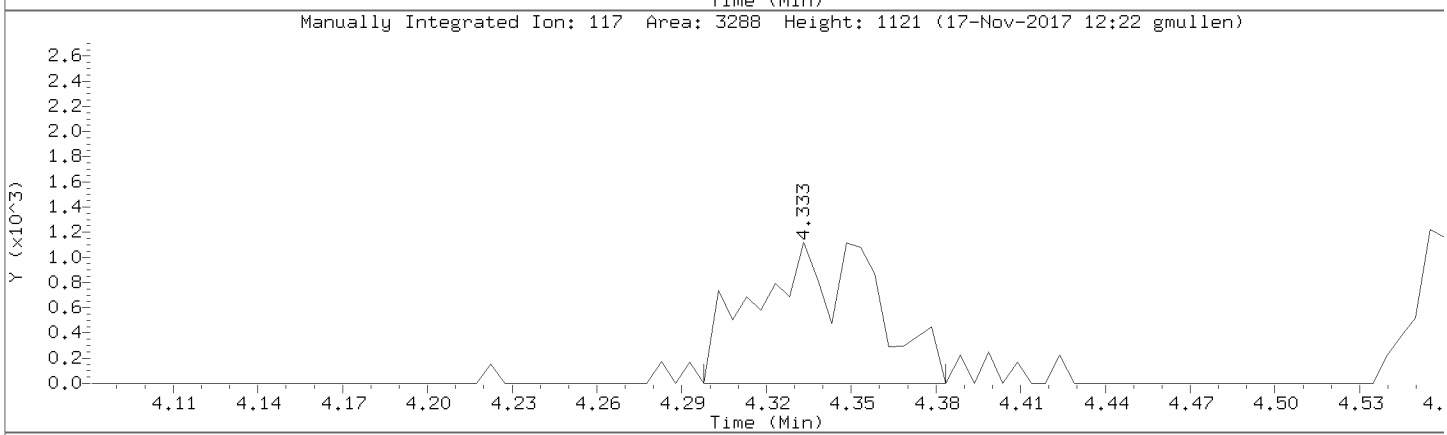
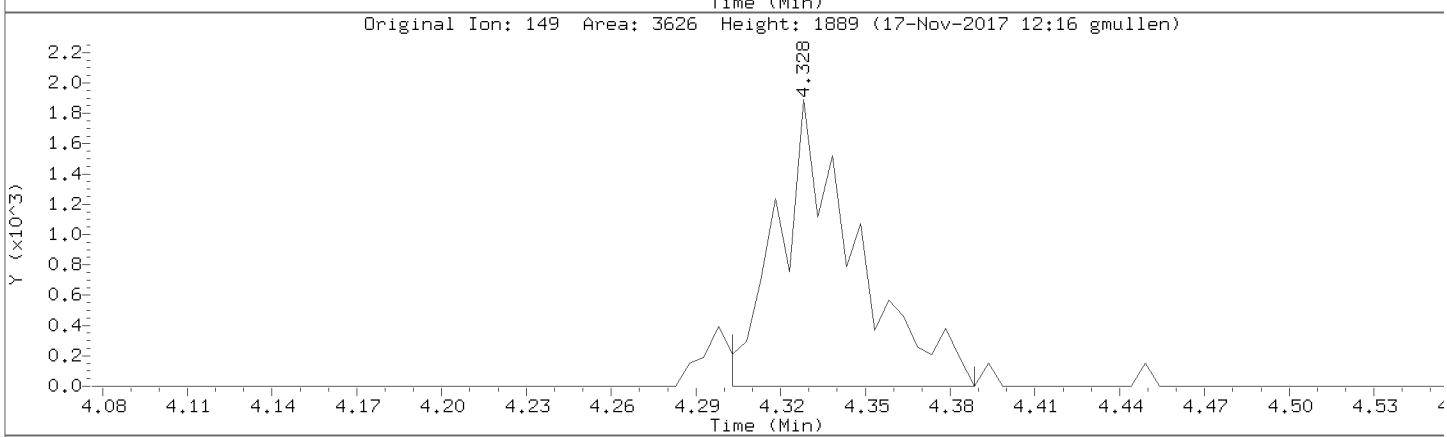
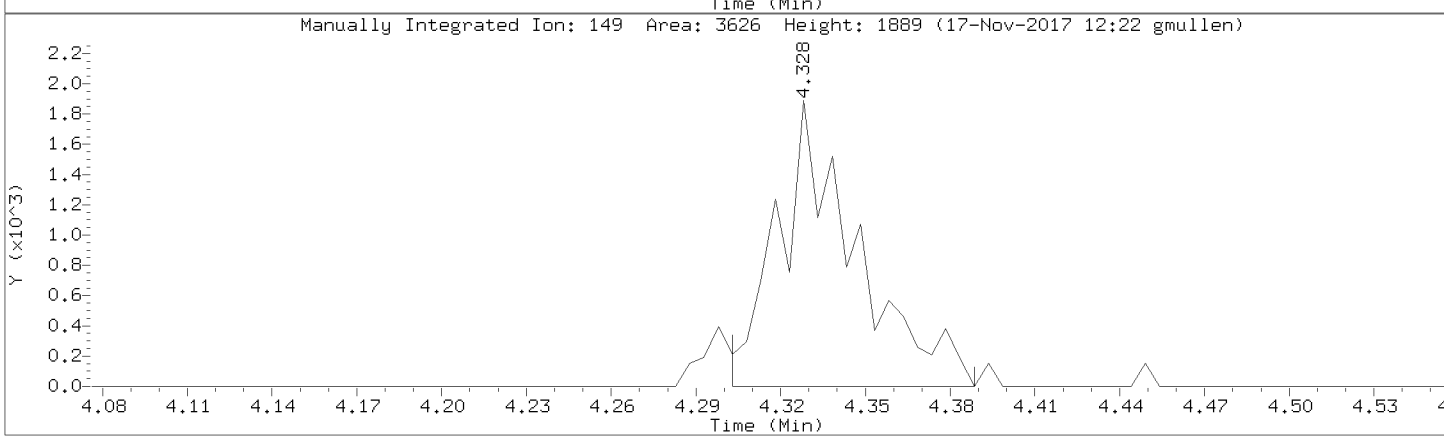
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Isoflurane Review Code: LT
CAS Number: 26675-46-7









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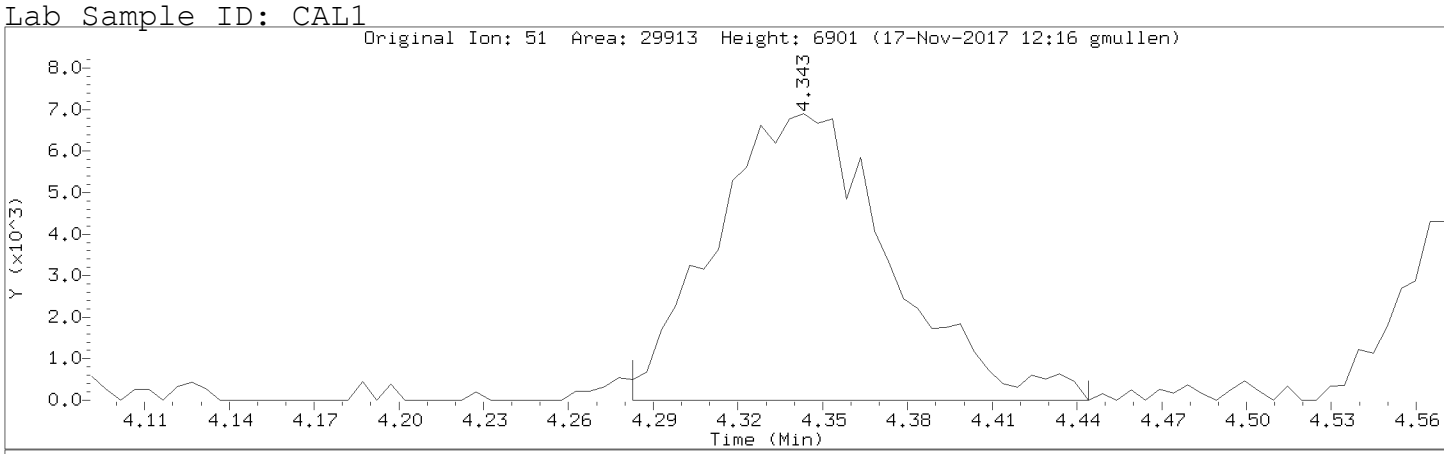
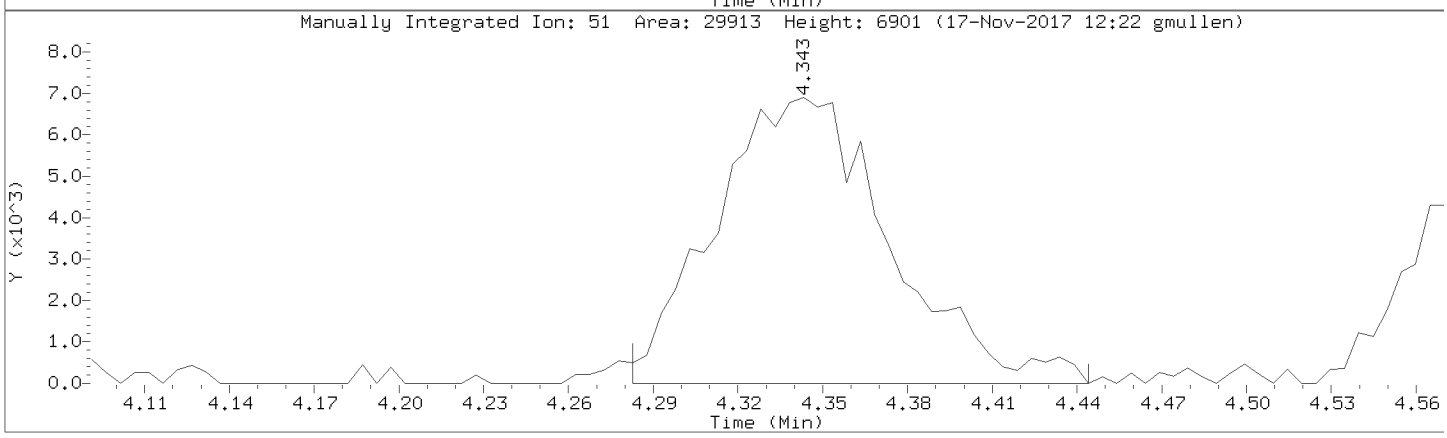
Instrument: 20msvd.i
Lab Sample ID: CAL1





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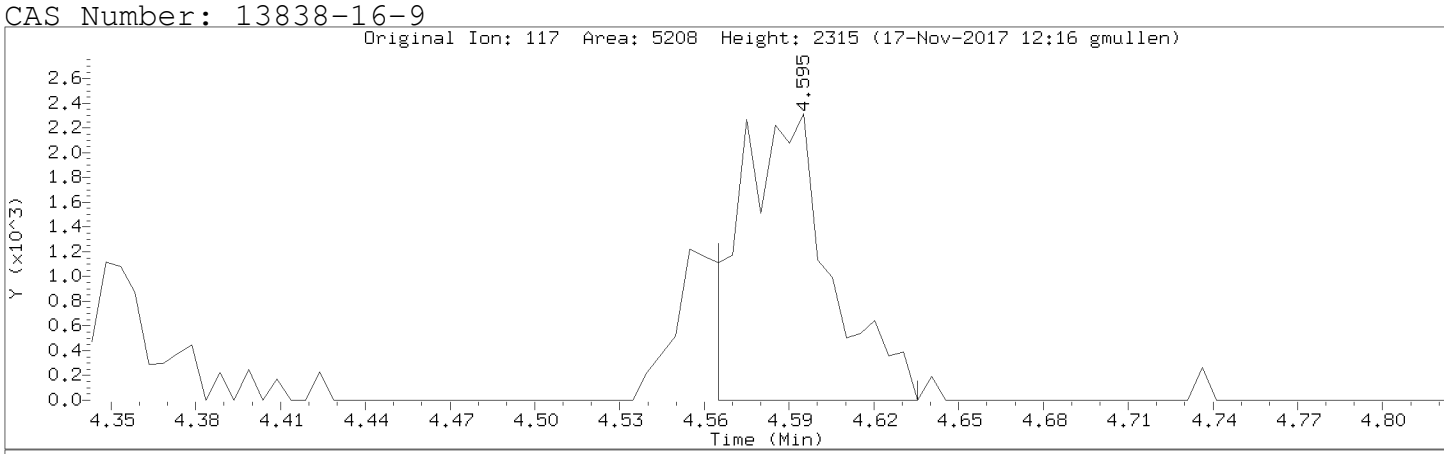
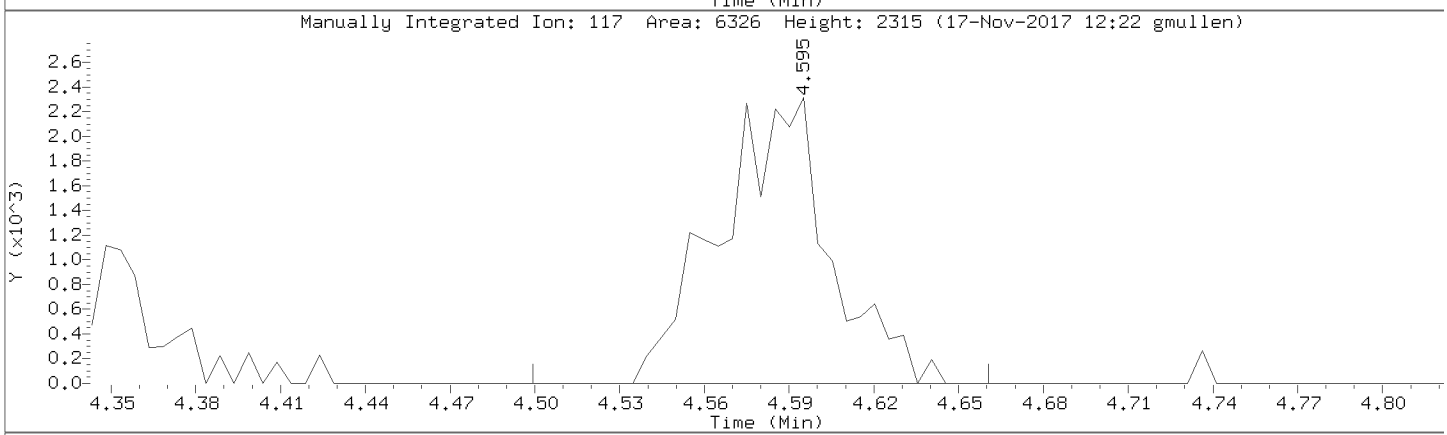
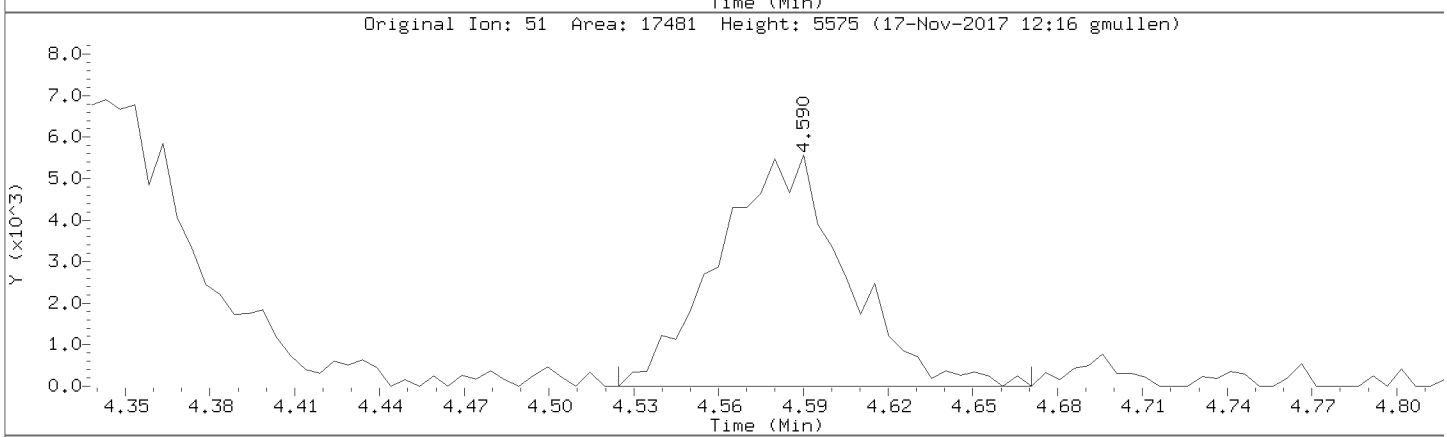
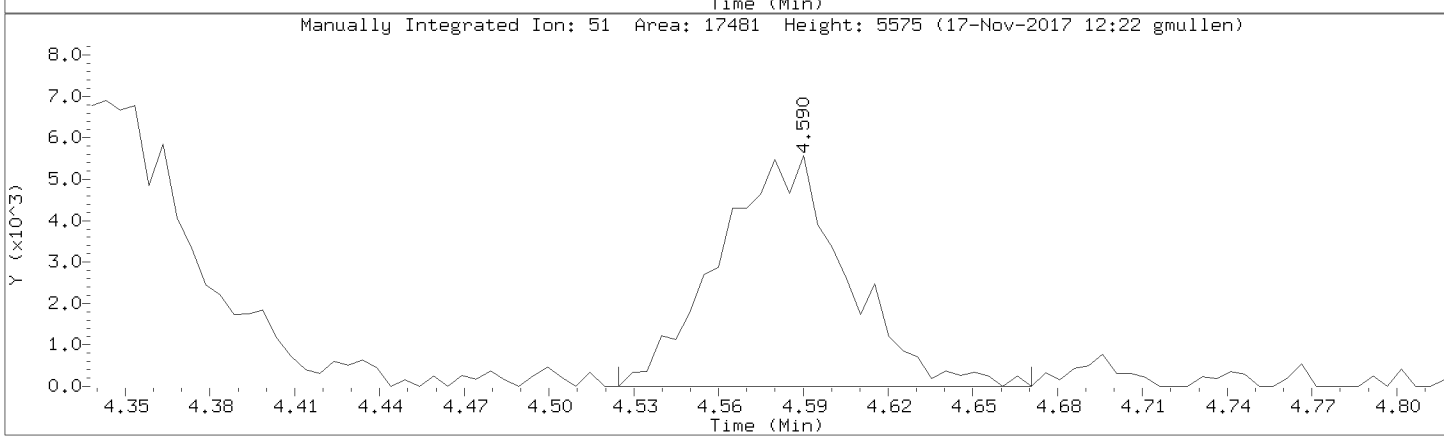
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Enflurane Review Code: LT
CAS Number: 13838-16-9









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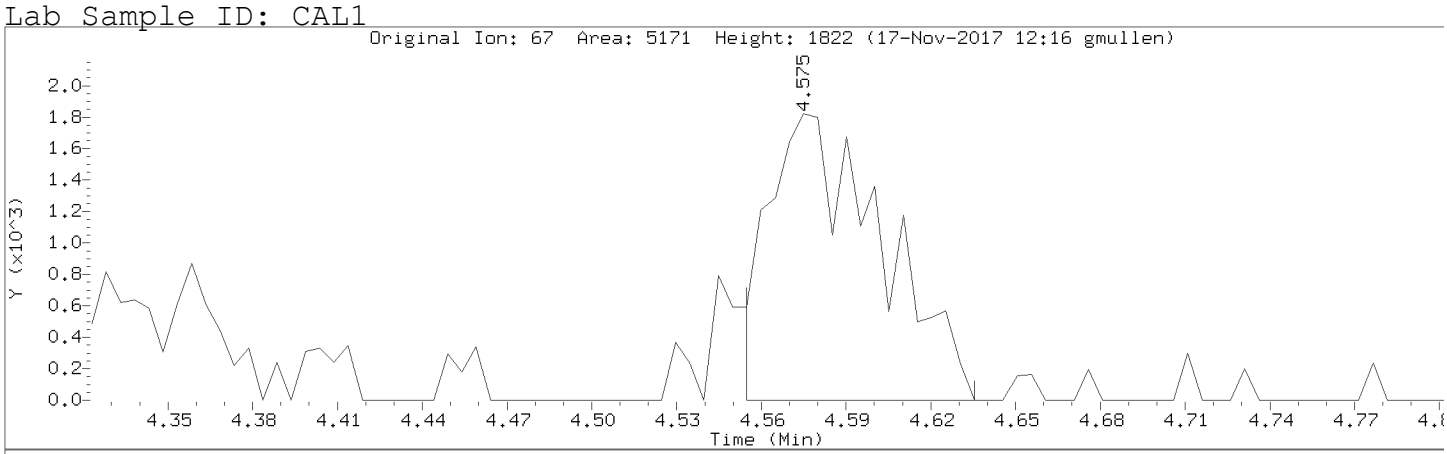
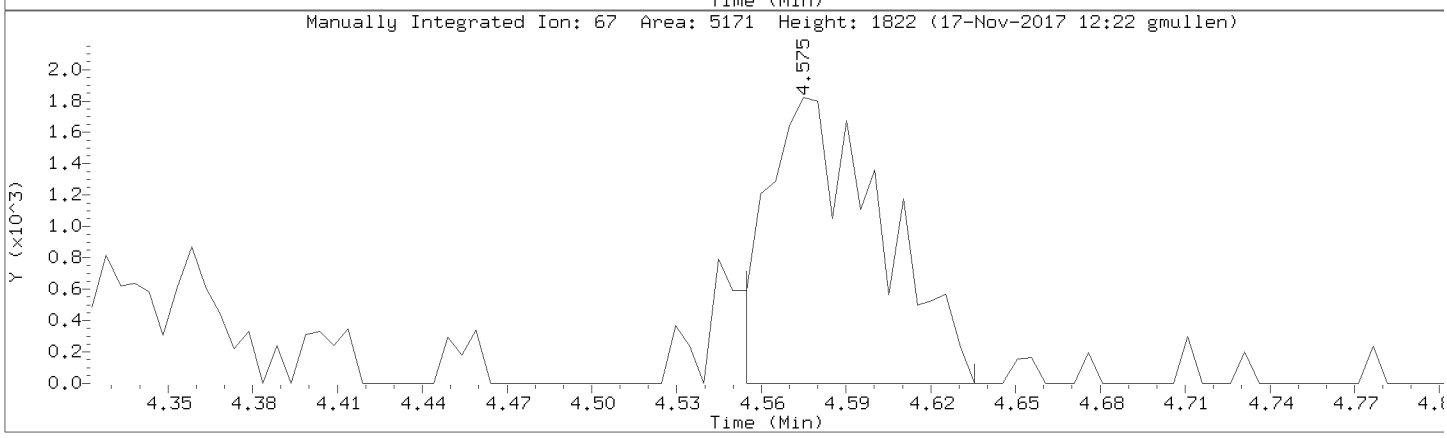
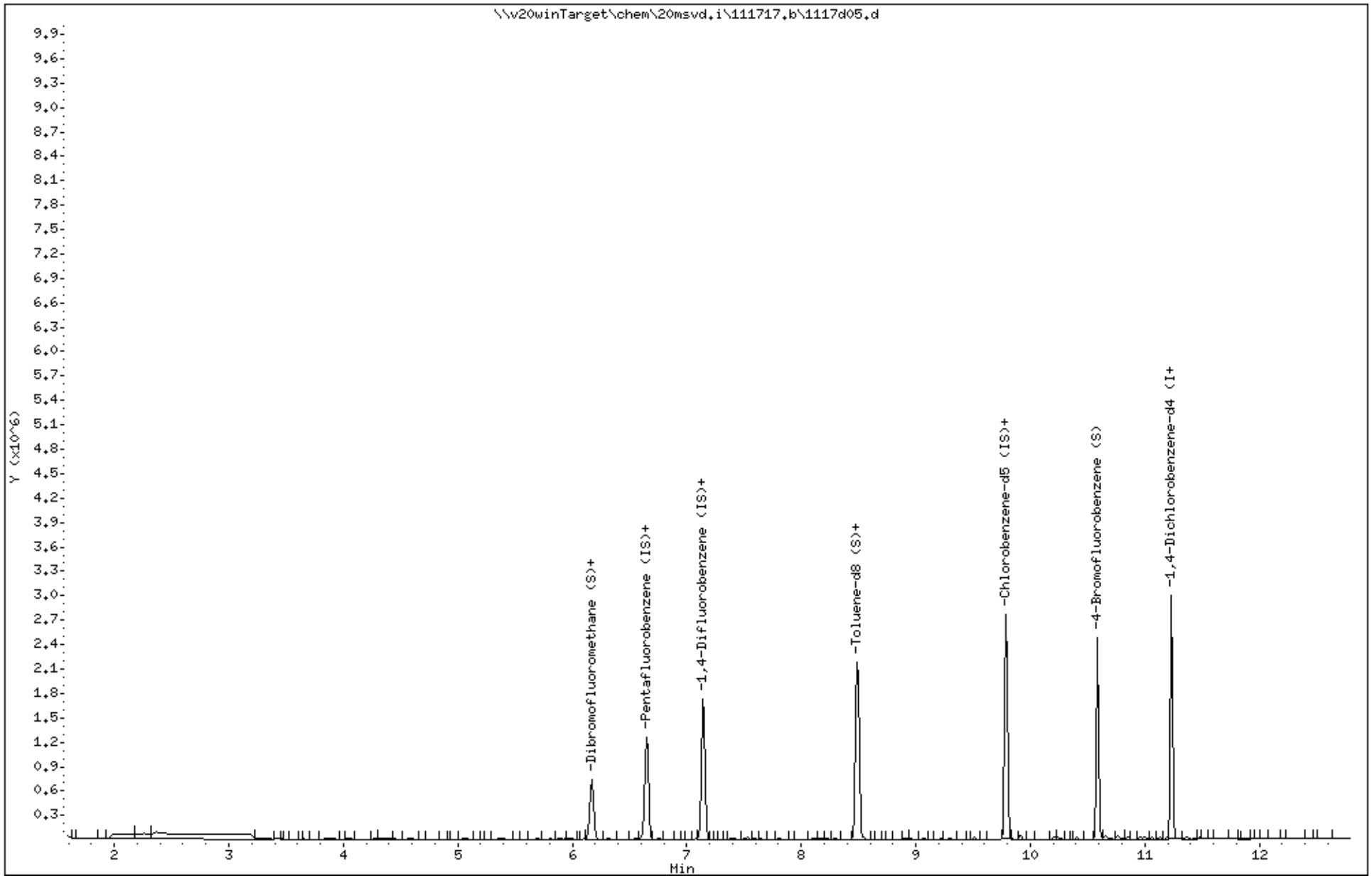
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1





Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d05.d
Date : 17-NOV-2017 09:29
Client ID: CAL1
Instrument: 20msvd.i
Sample Info: CAL1,54397:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



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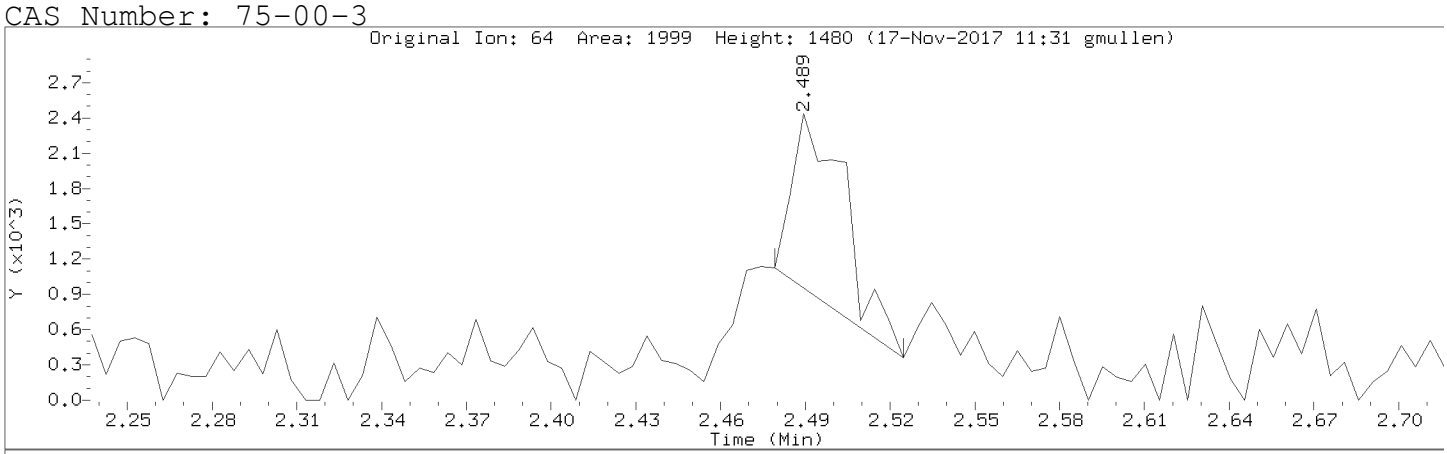
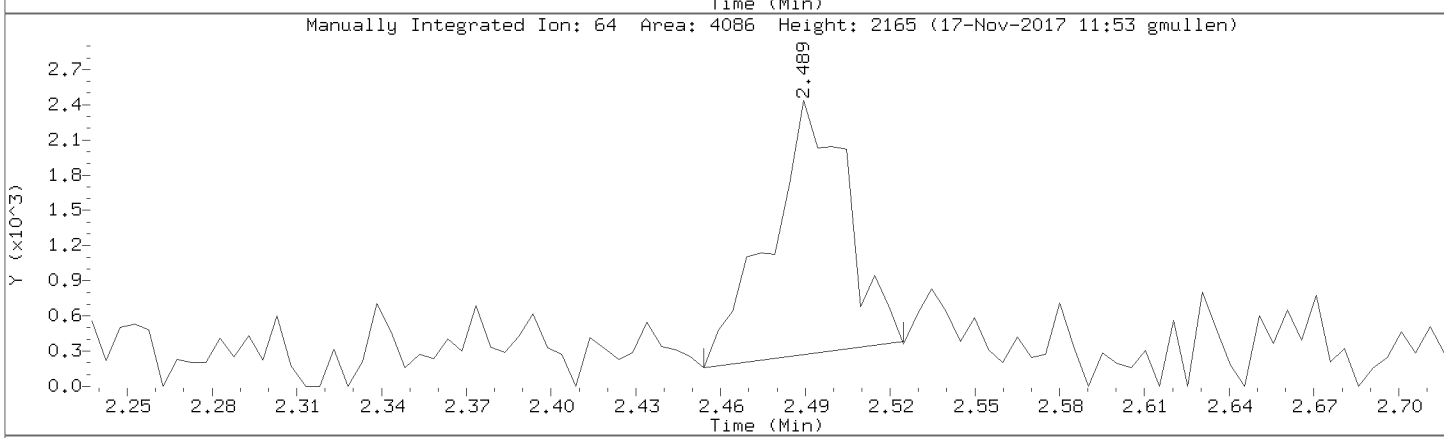
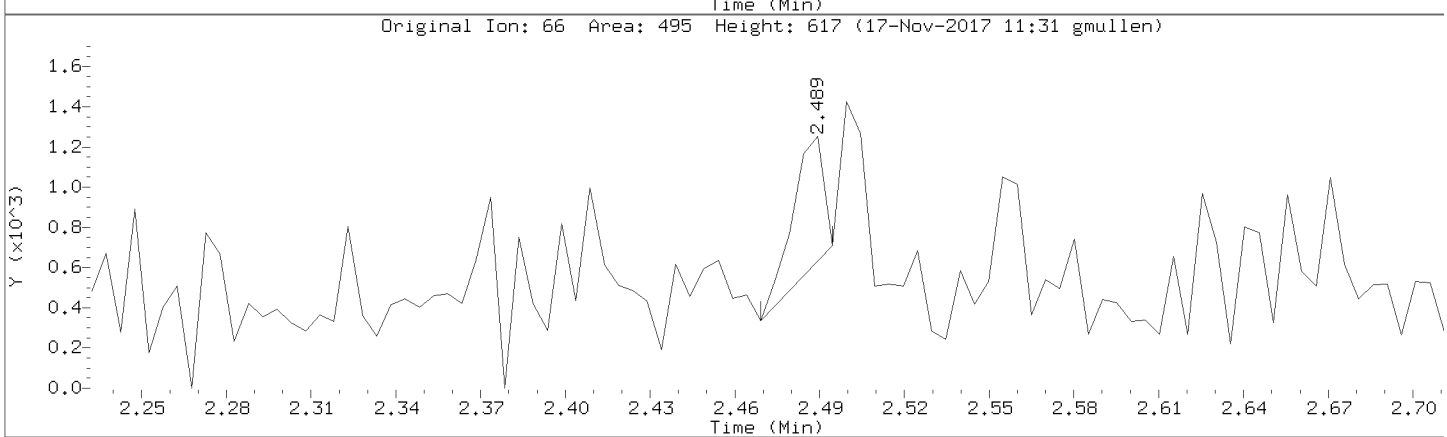
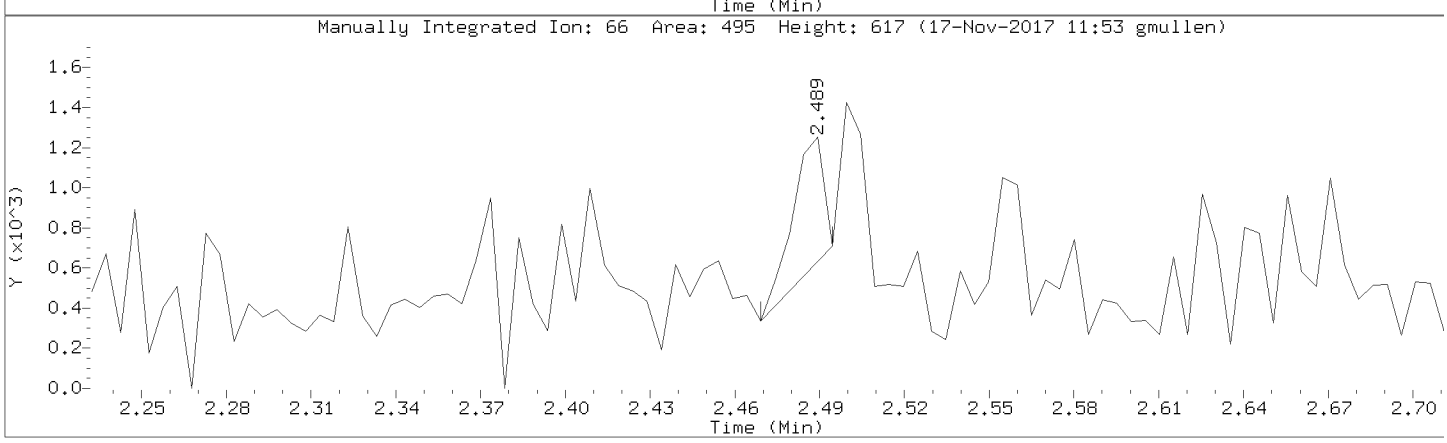
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Chloroethane Review Code: LT
CAS Number: 75-00-3









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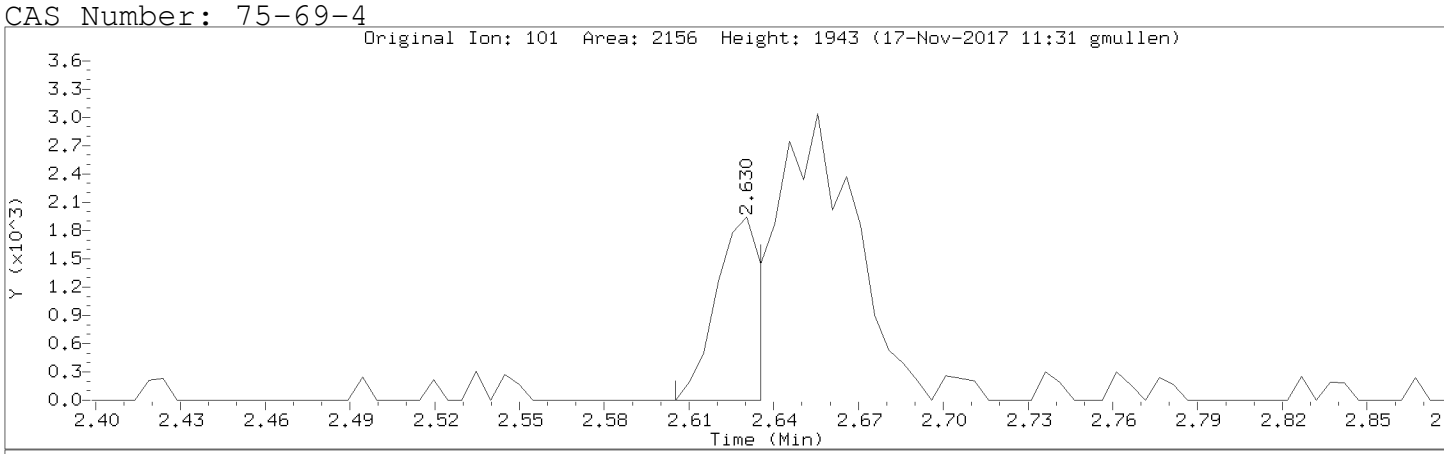
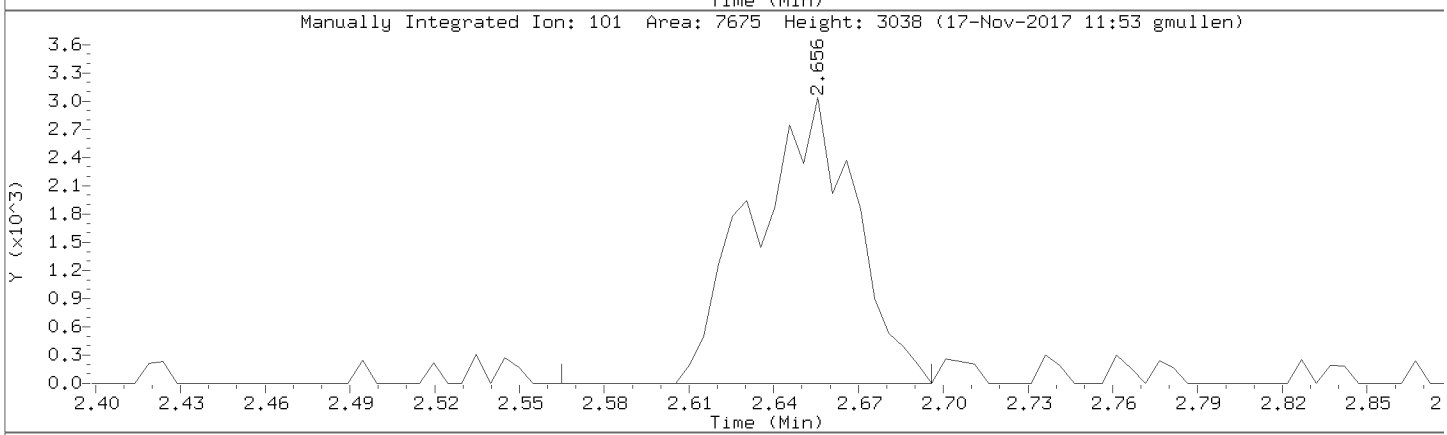
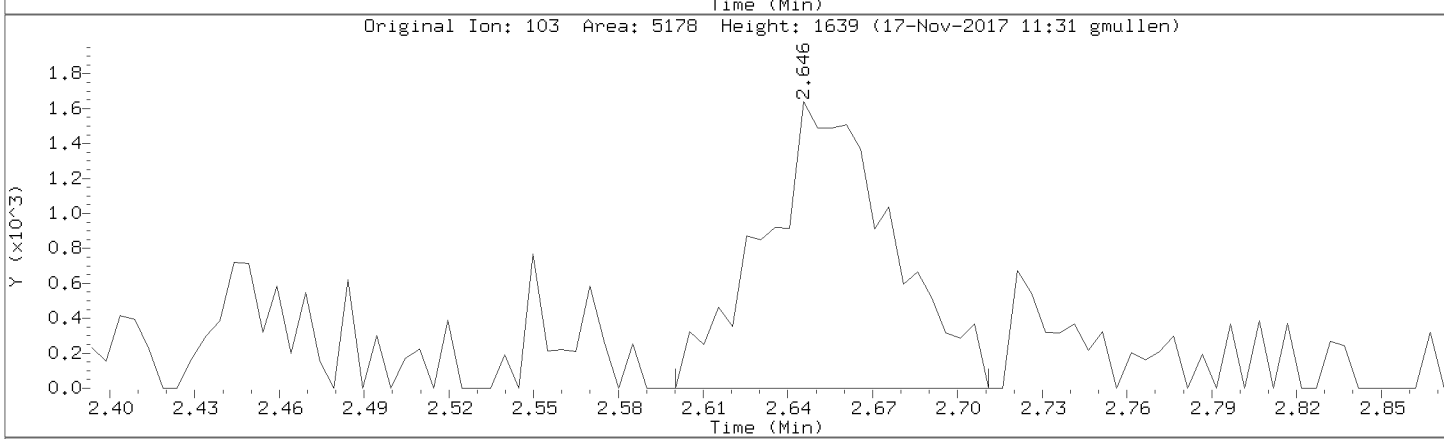
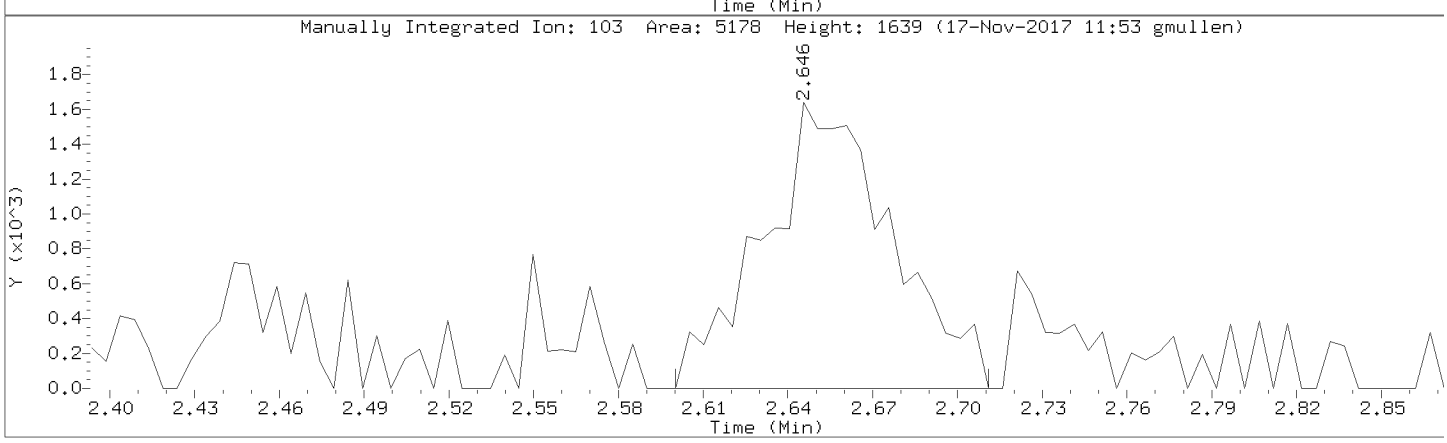
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Trichlorofluoromethane Review Code: LT
CAS Number: 75-69-4









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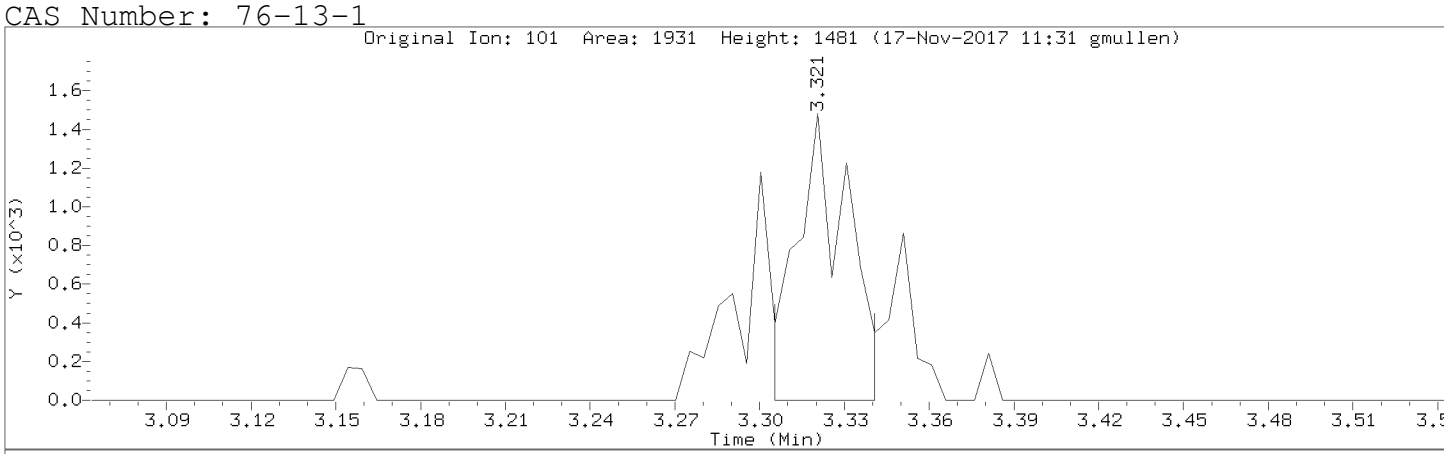
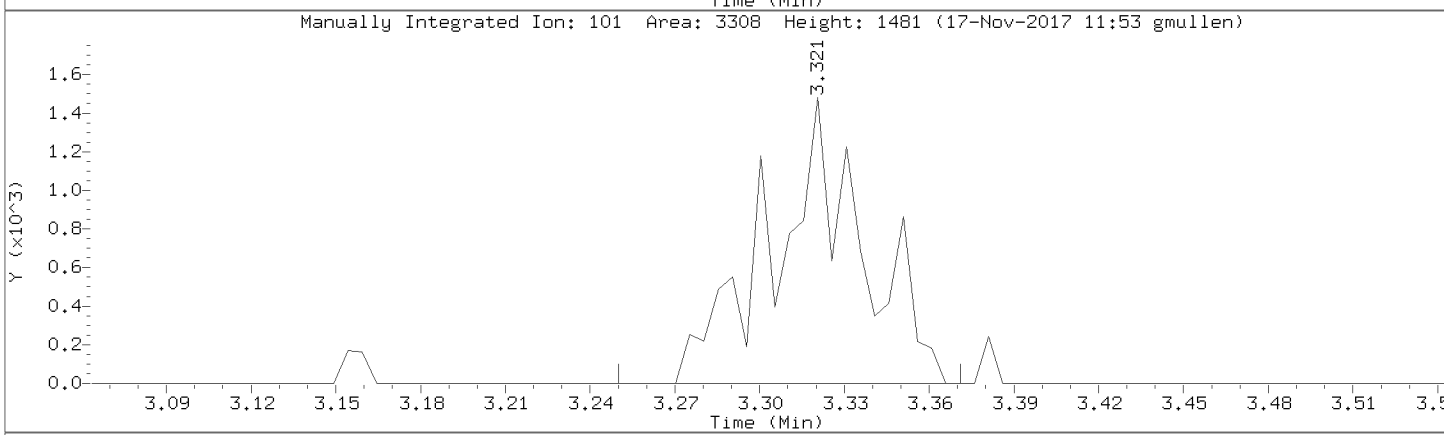
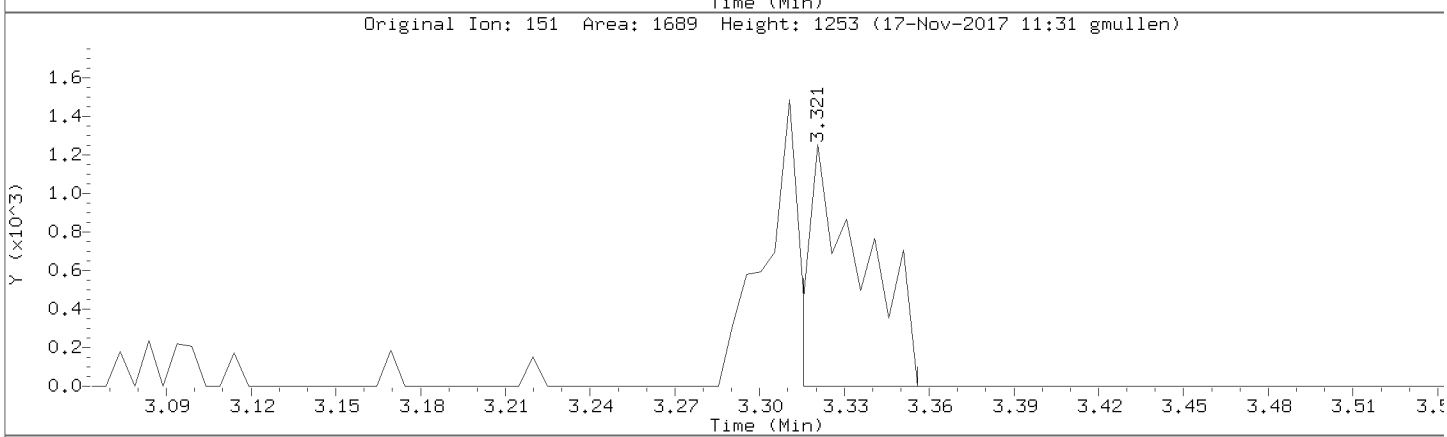
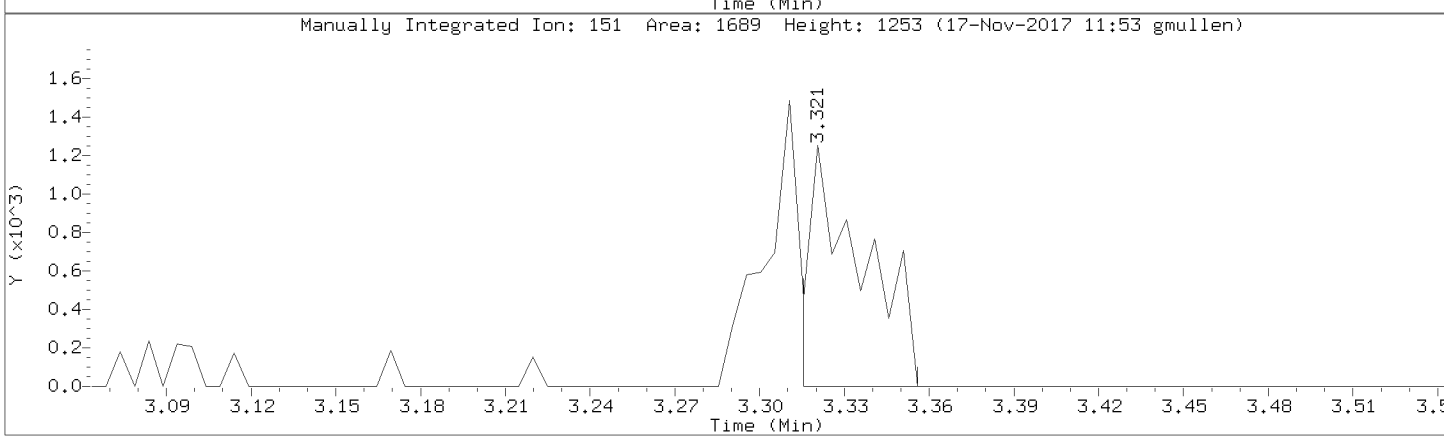
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,1,2-Trichlorotrifluoroethane Review Code: LT
CAS Number: 76-13-1









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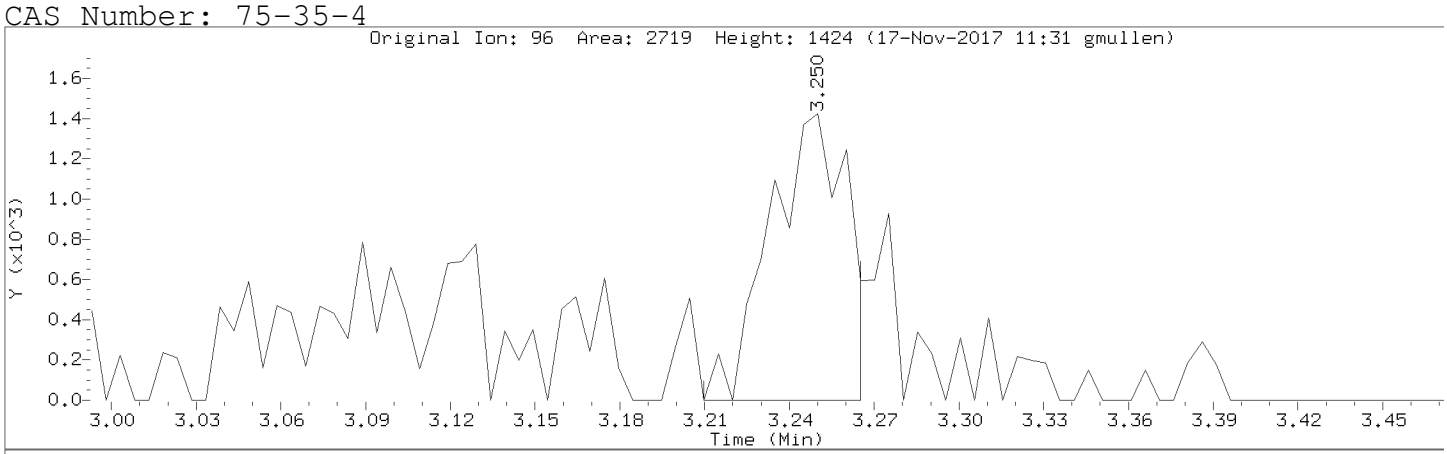
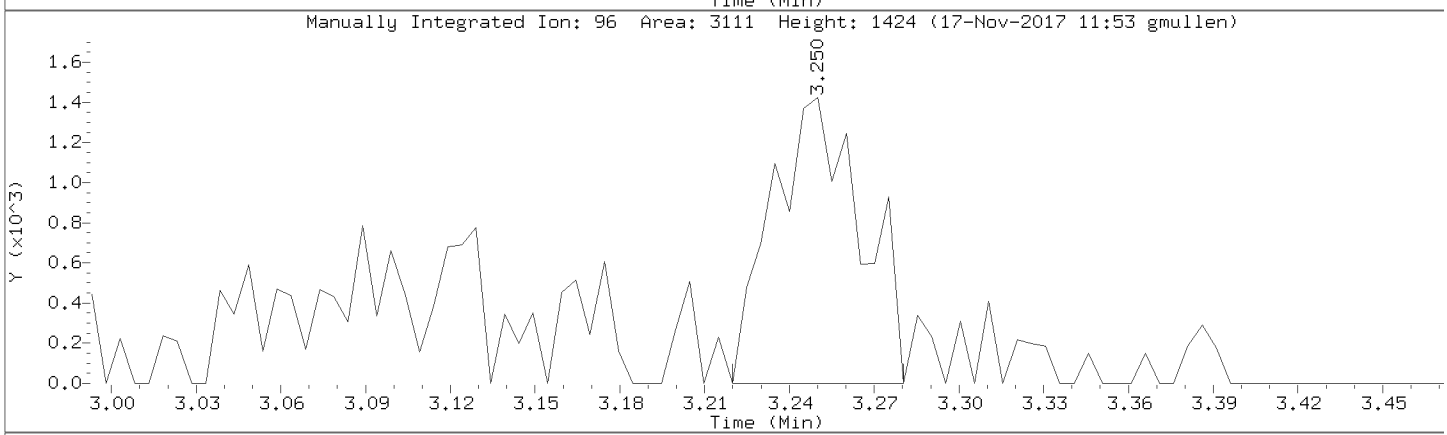
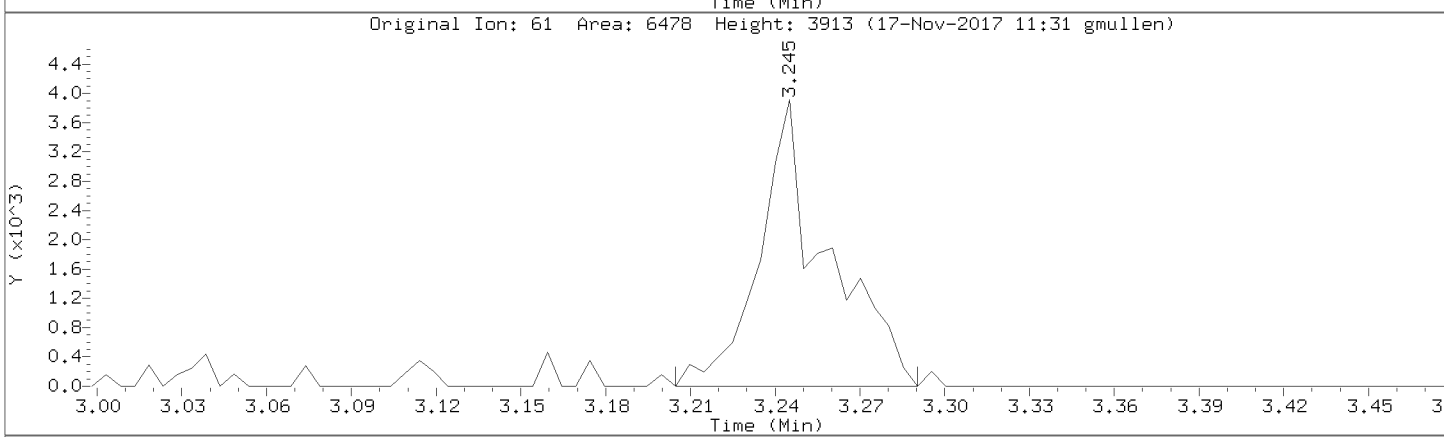
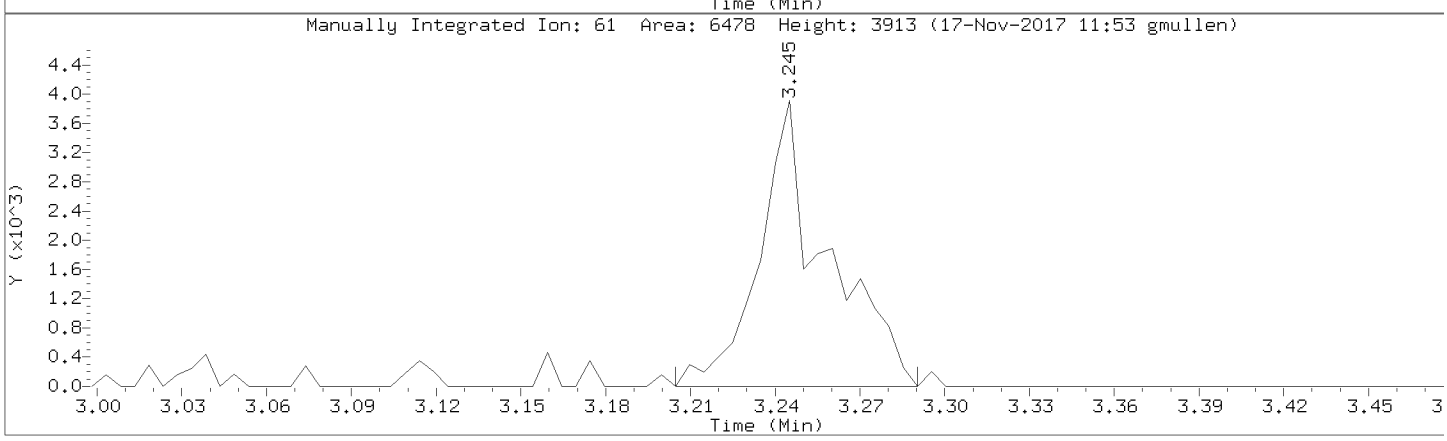
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d05.d
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,1-Dichloroethene Review Code: LT
CAS Number: 75-35-4

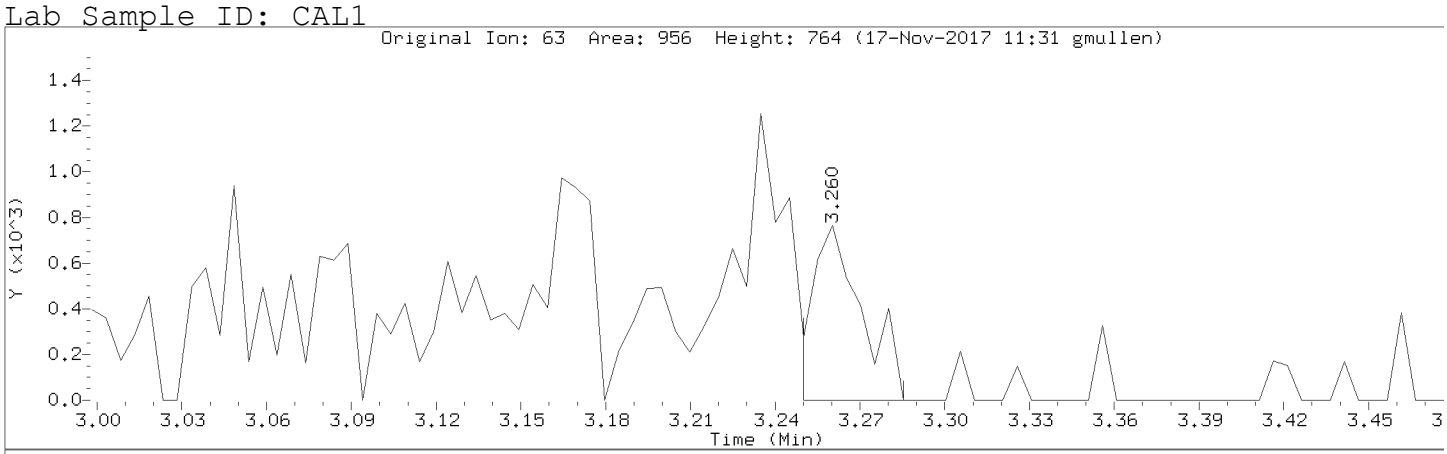


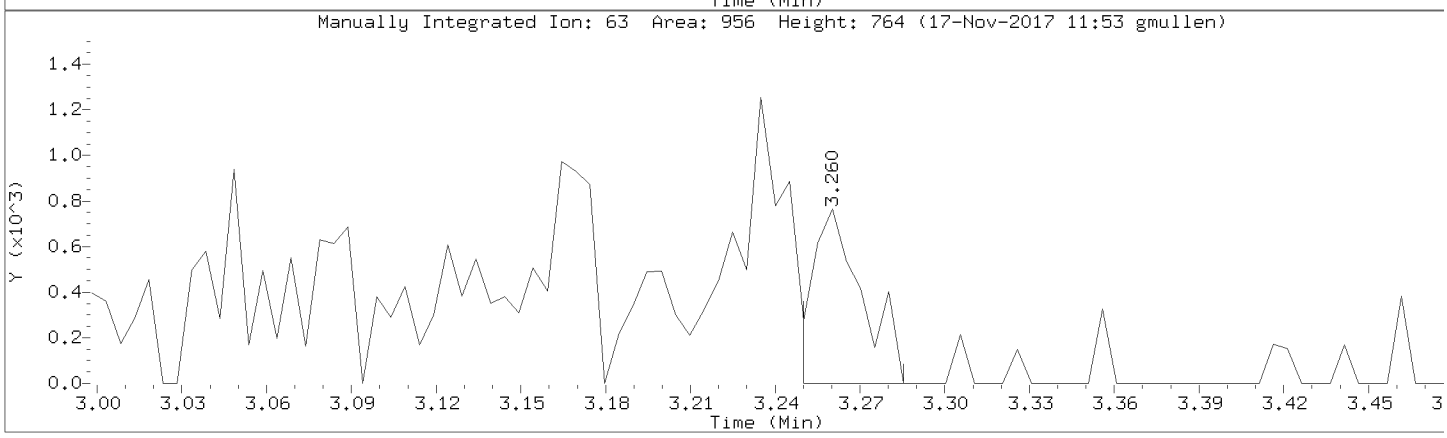






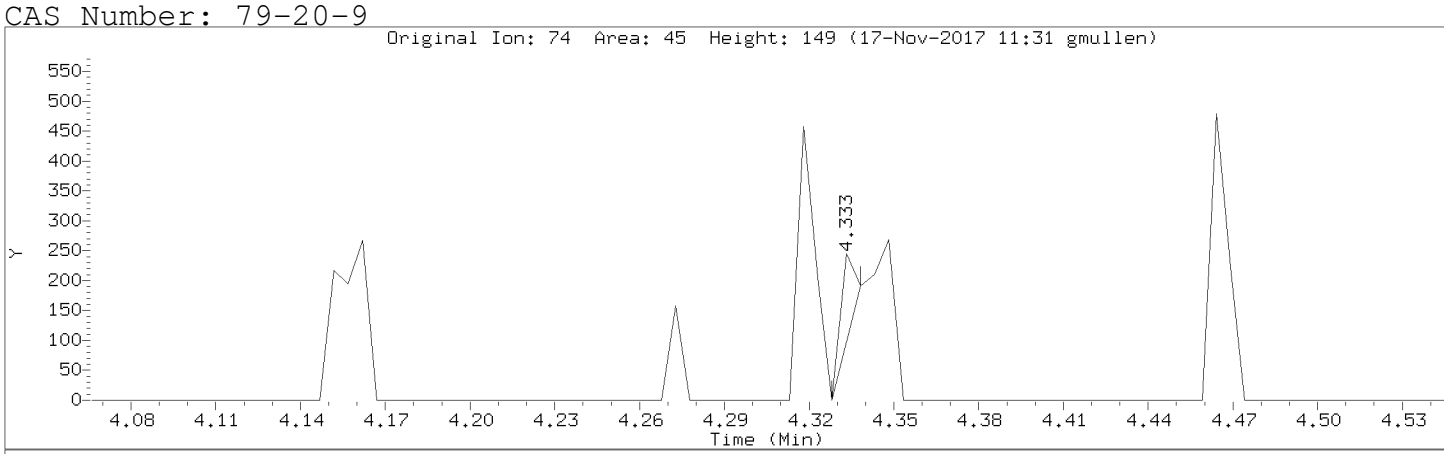
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d05.d
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

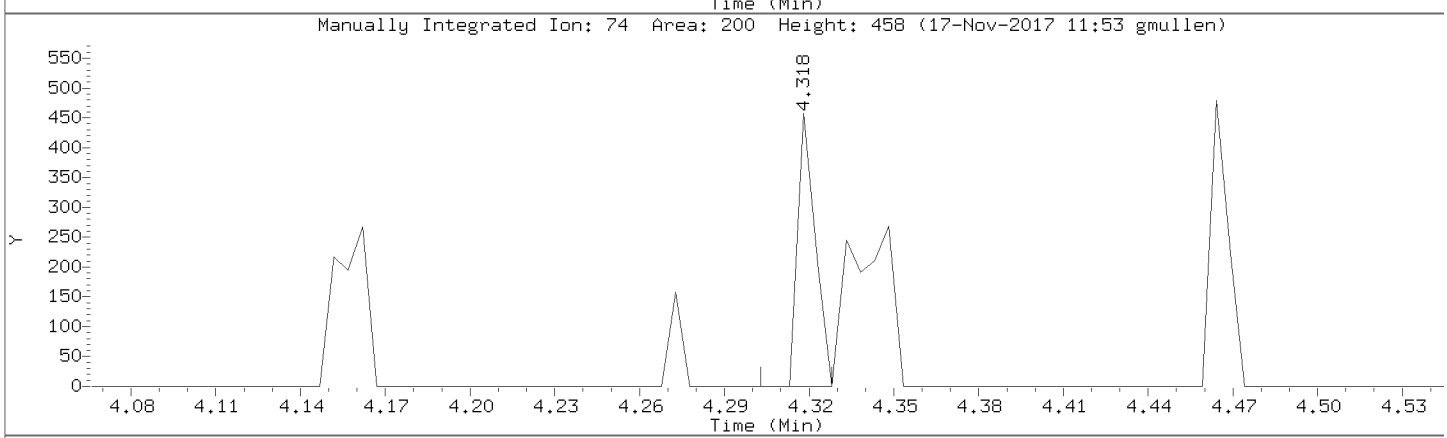


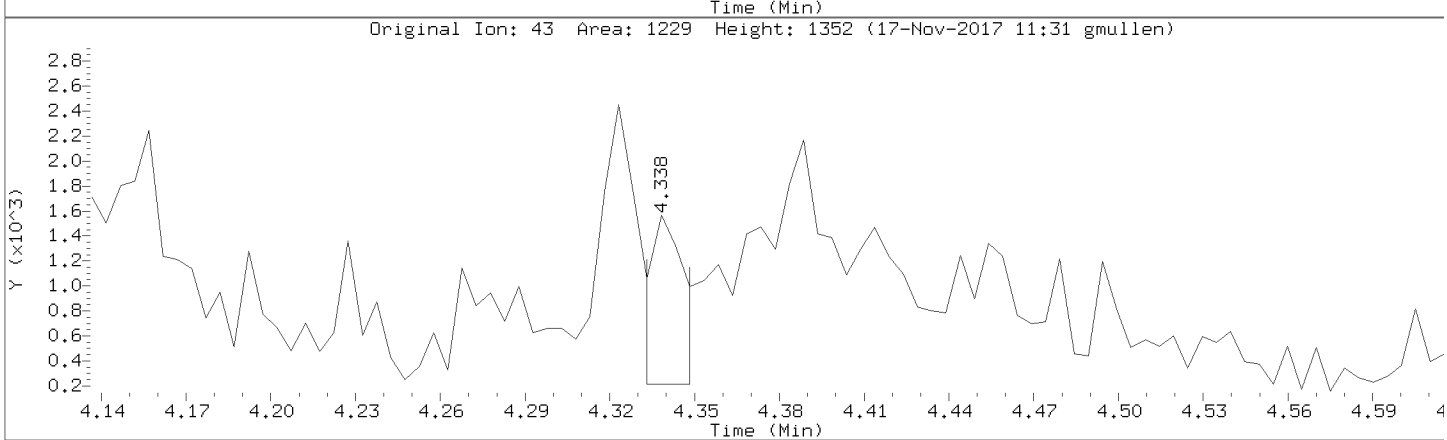


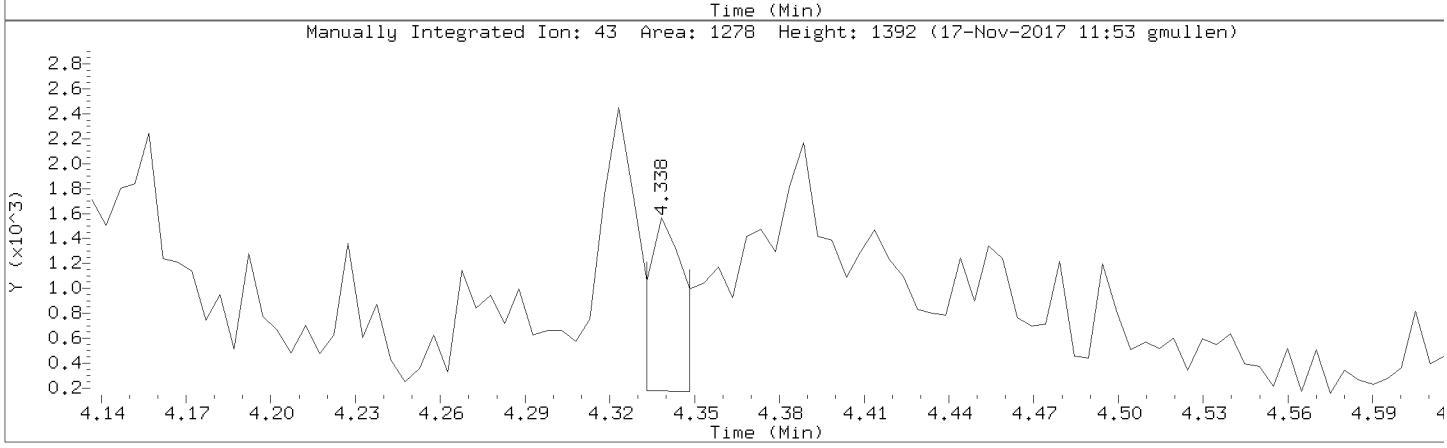
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d05.d
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Methyl Acetate Review Code:
CAS Number: 79-20-9









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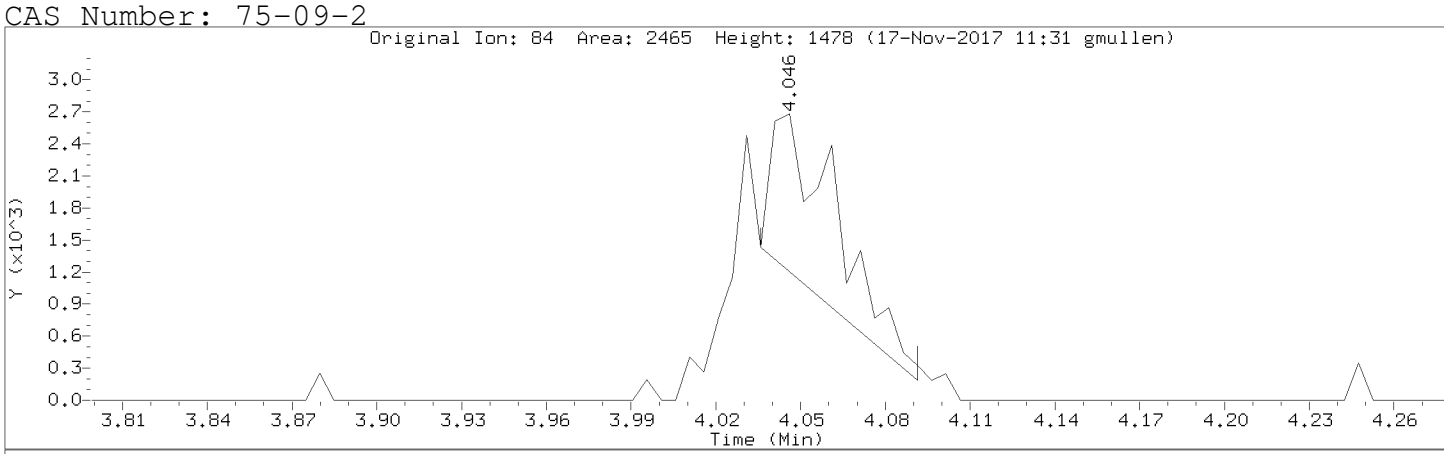
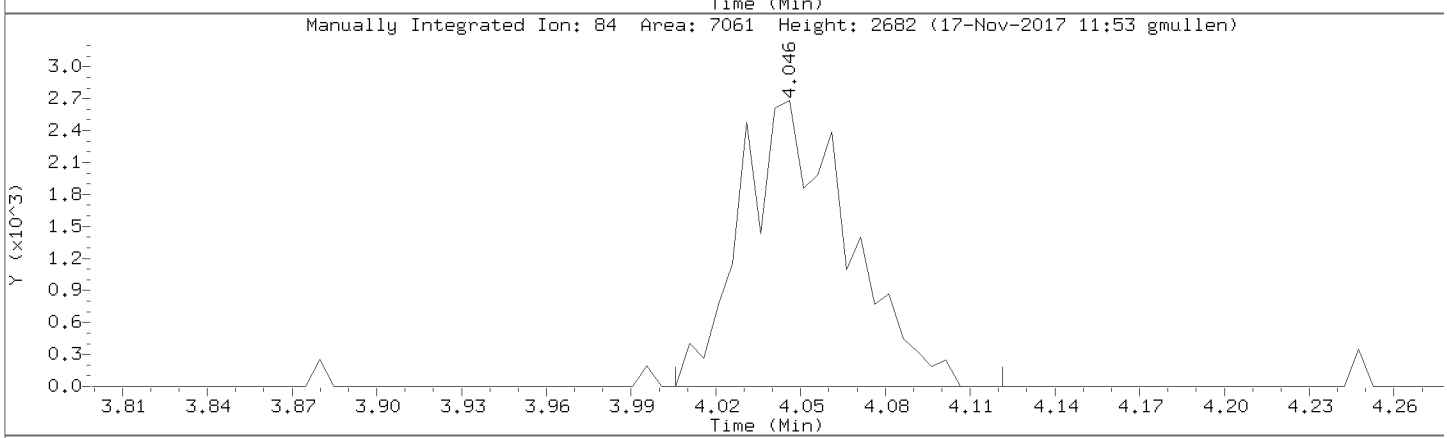
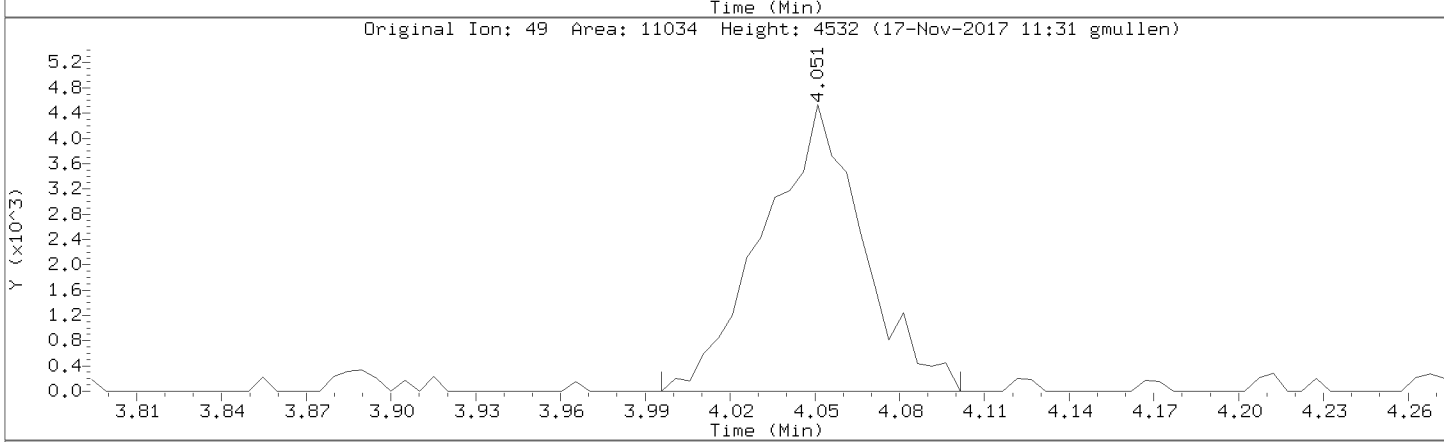
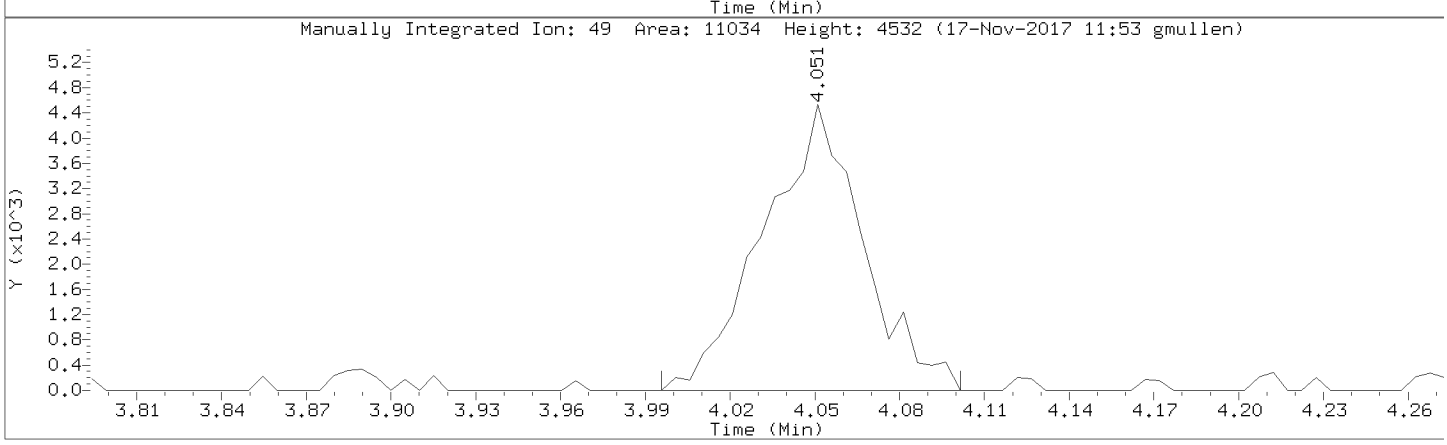
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Methylene Chloride Review Code: LT
CAS Number: 75-09-2









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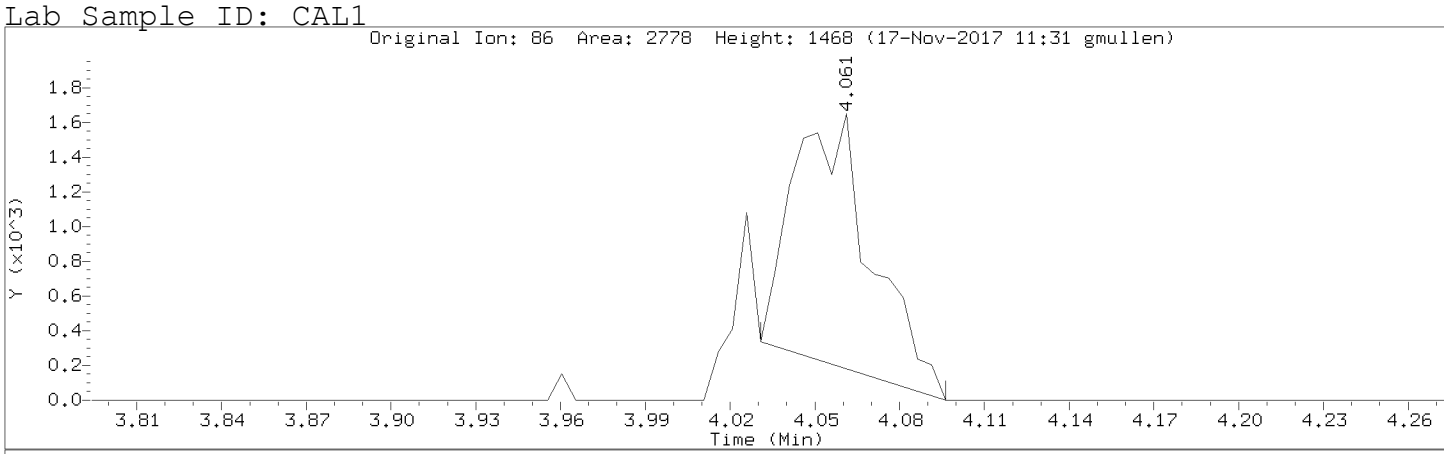
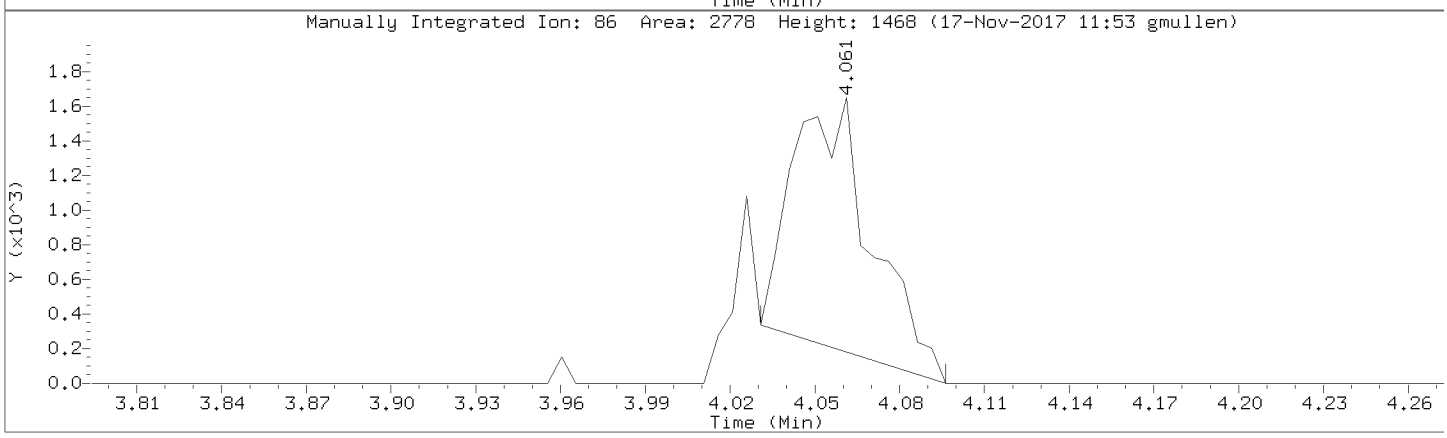
Instrument: 20msvd.i
Lab Sample ID: CAL1





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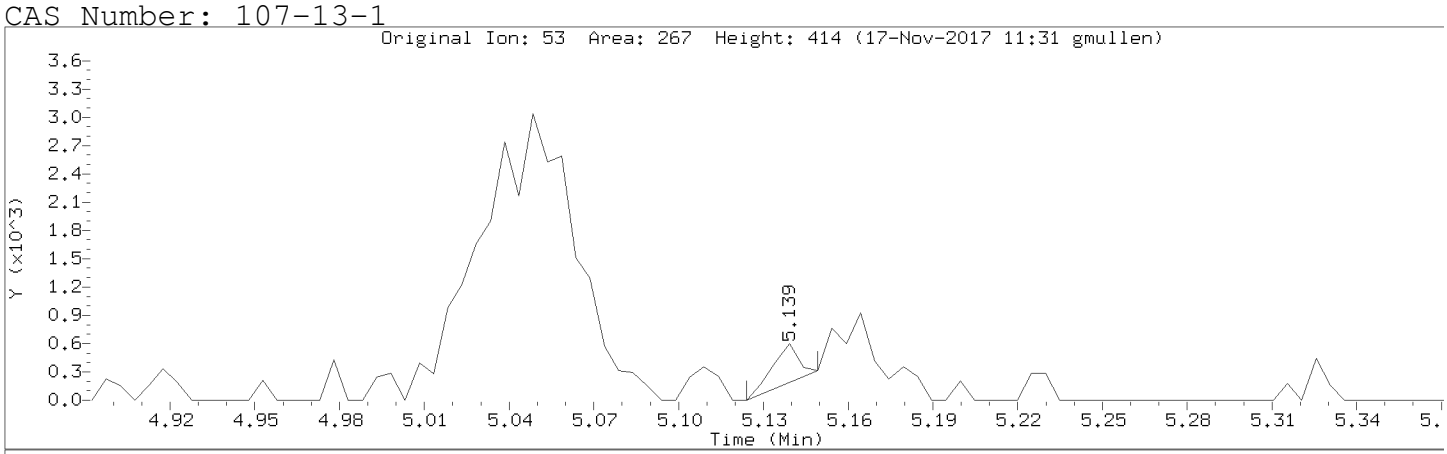
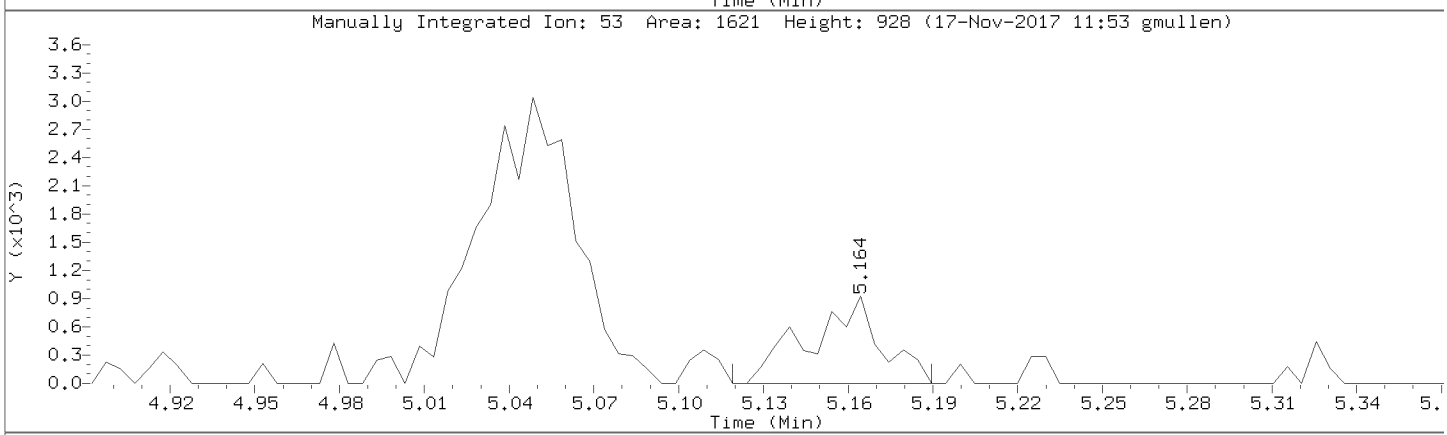
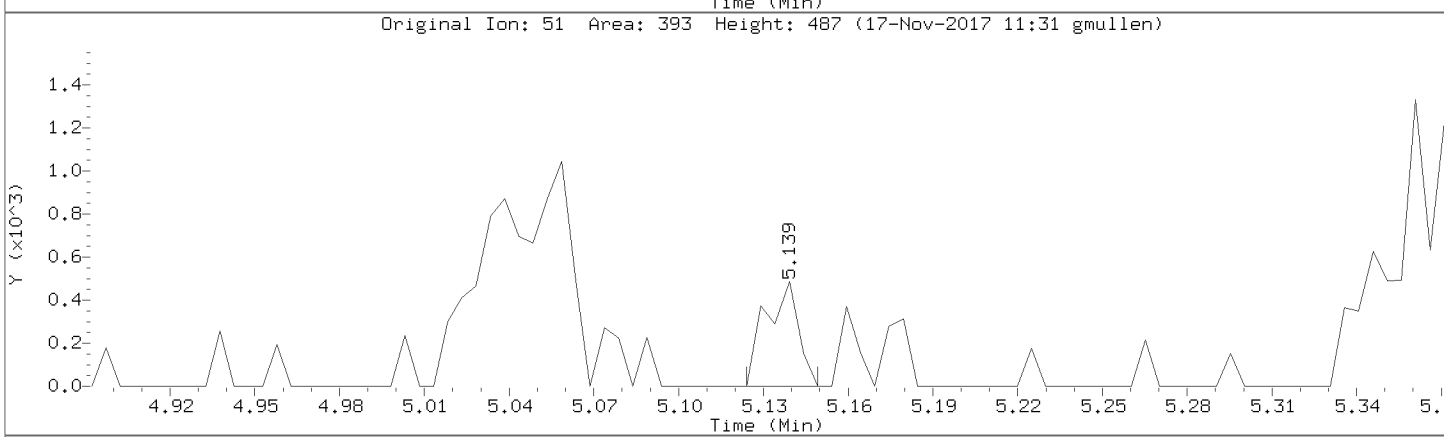
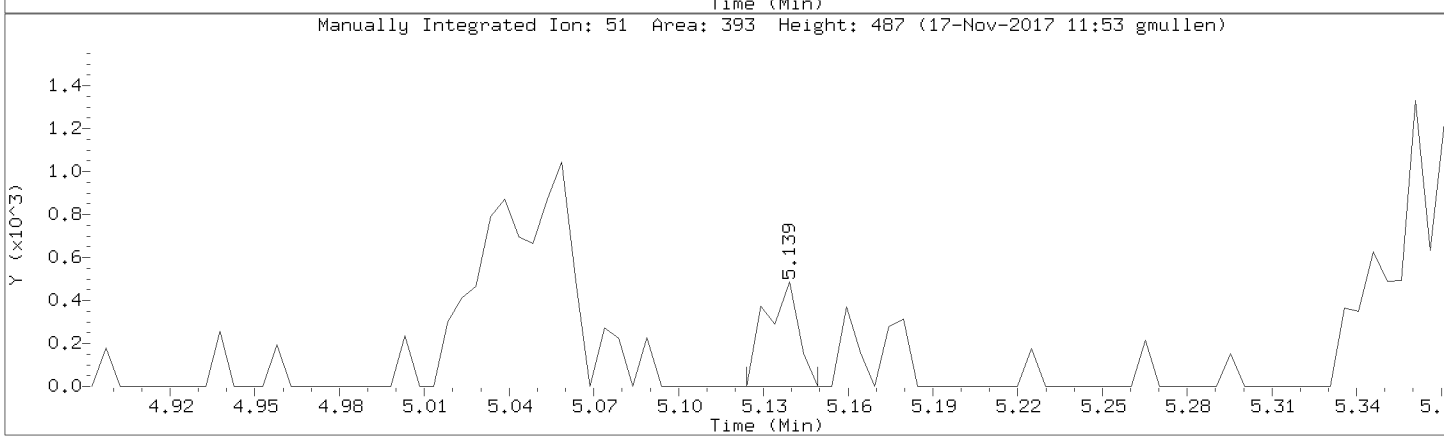
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Acrylonitrile Review Code: LT
CAS Number: 107-13-1









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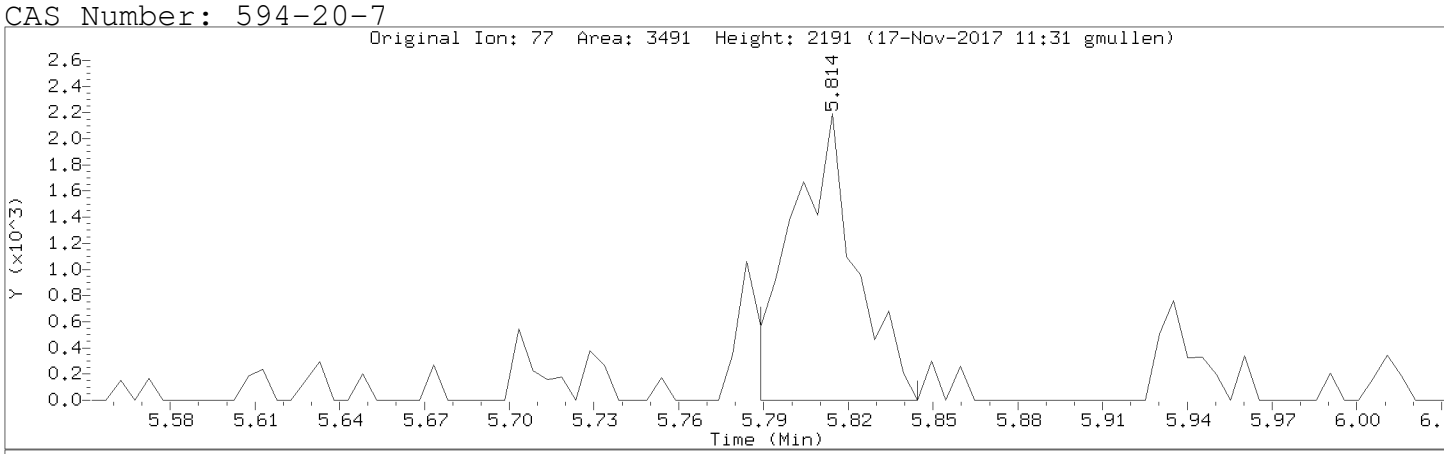
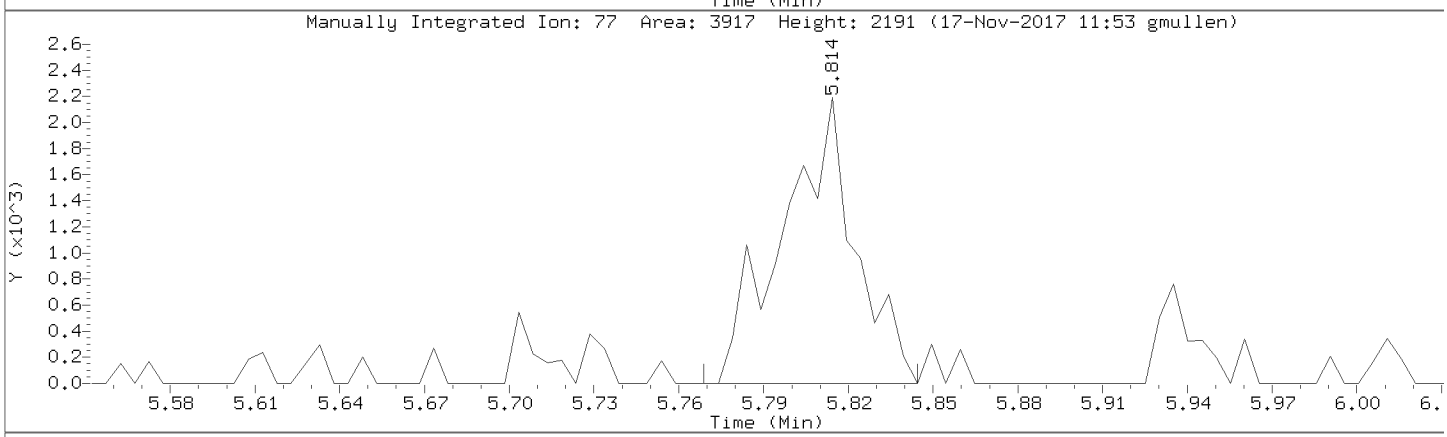
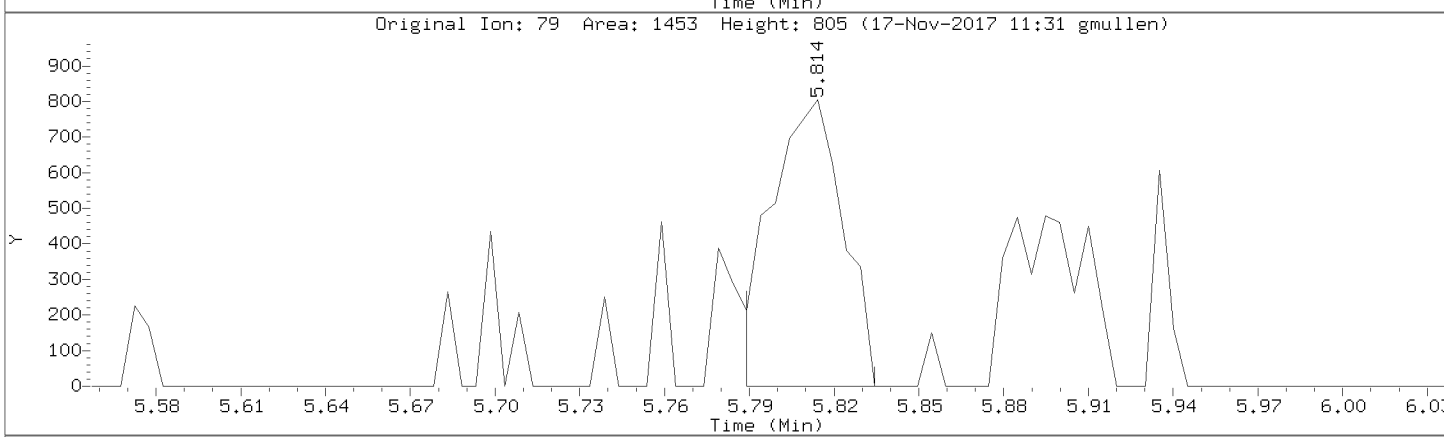
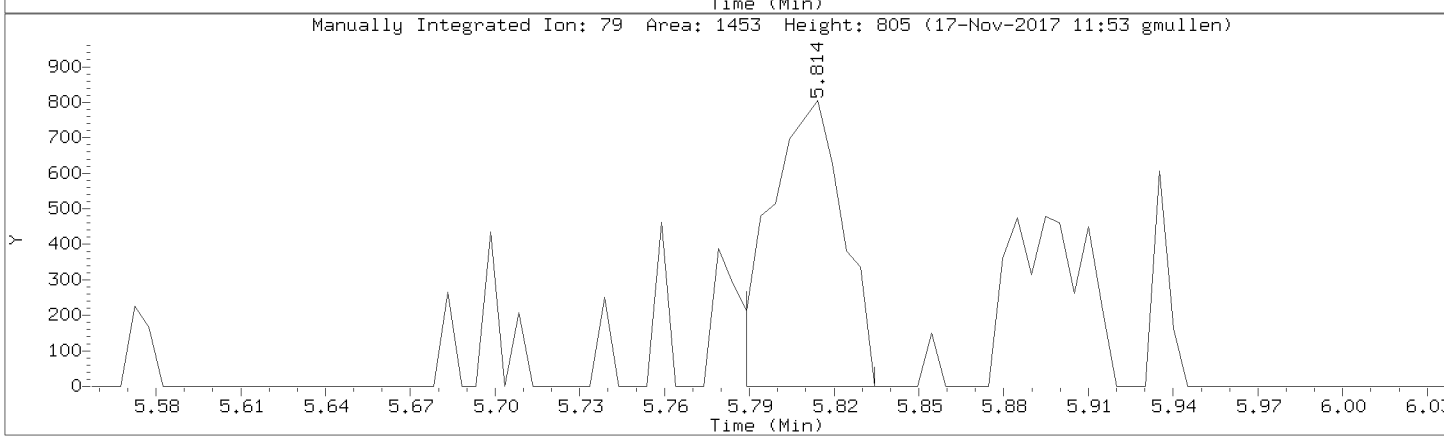
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 2,2-Dichloropropane Review Code: LT
CAS Number: 594-20-7









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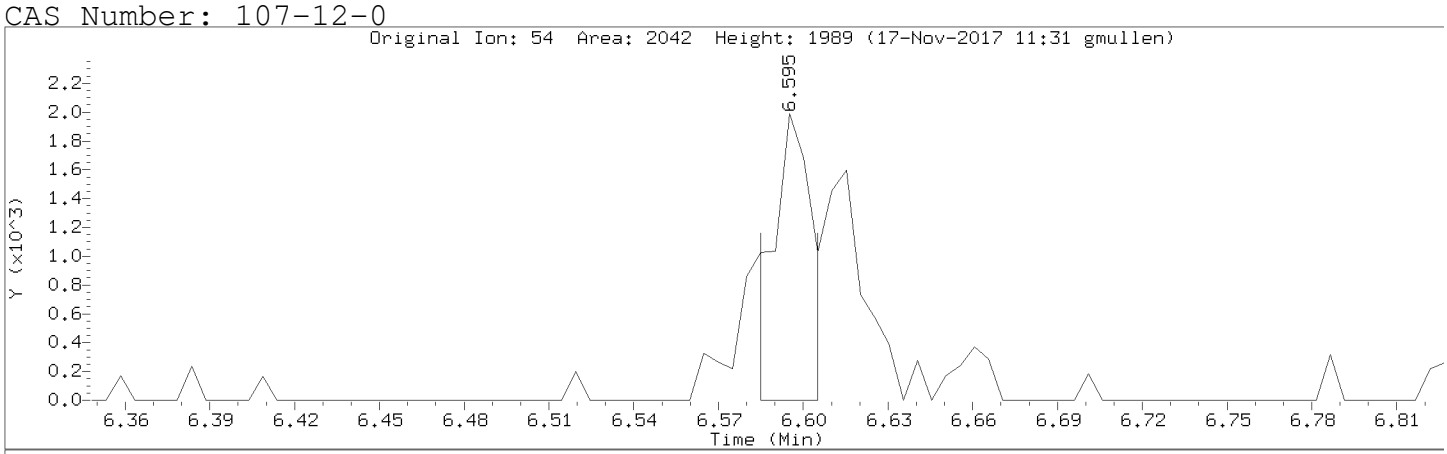
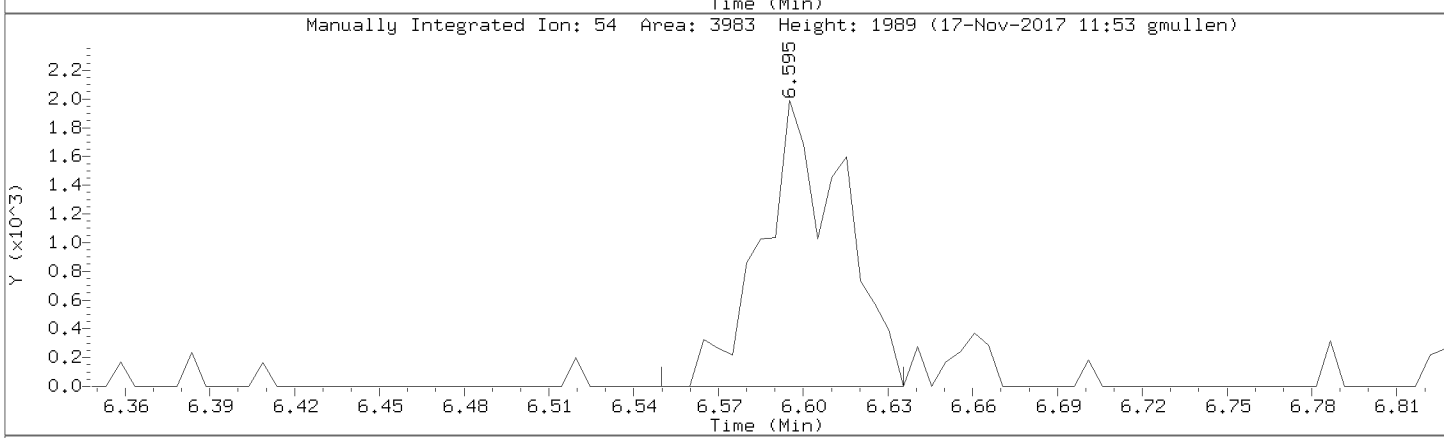
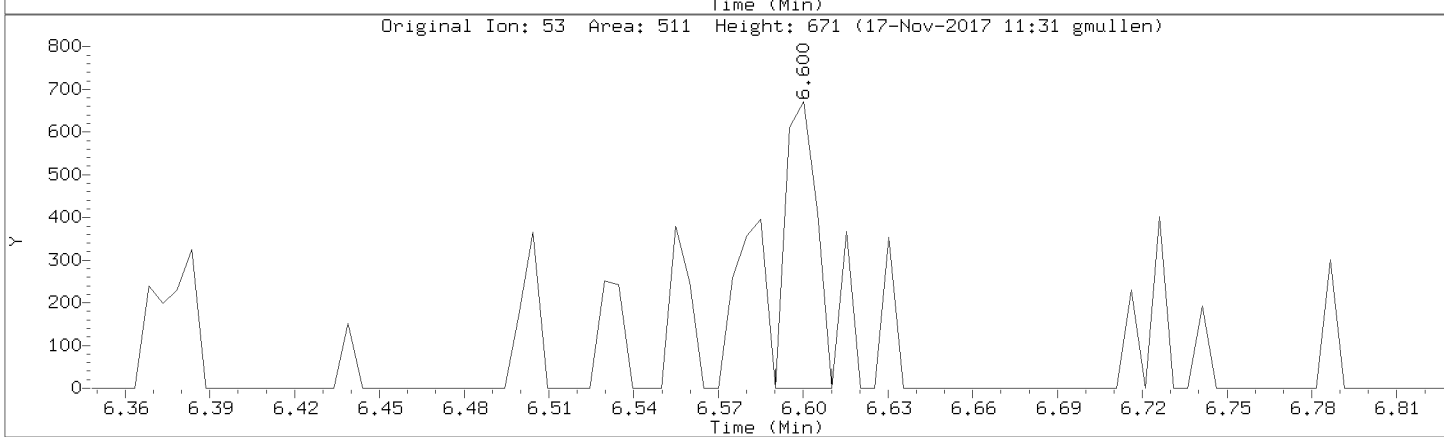
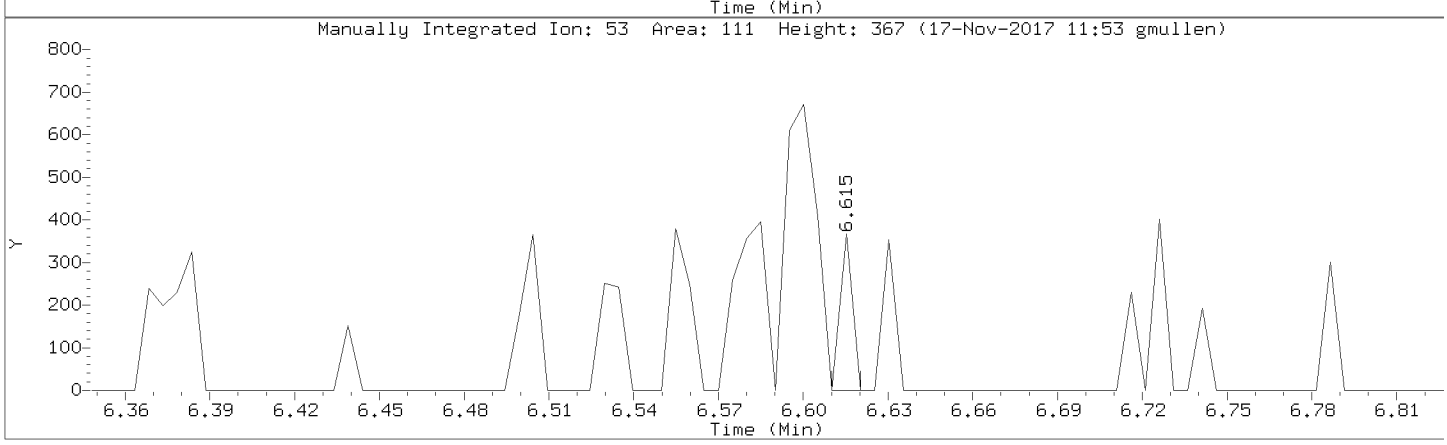
Injection Date: 17-NOV-2017 09:29
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Propionitrile Review Code: LT
CAS Number: 107-12-0









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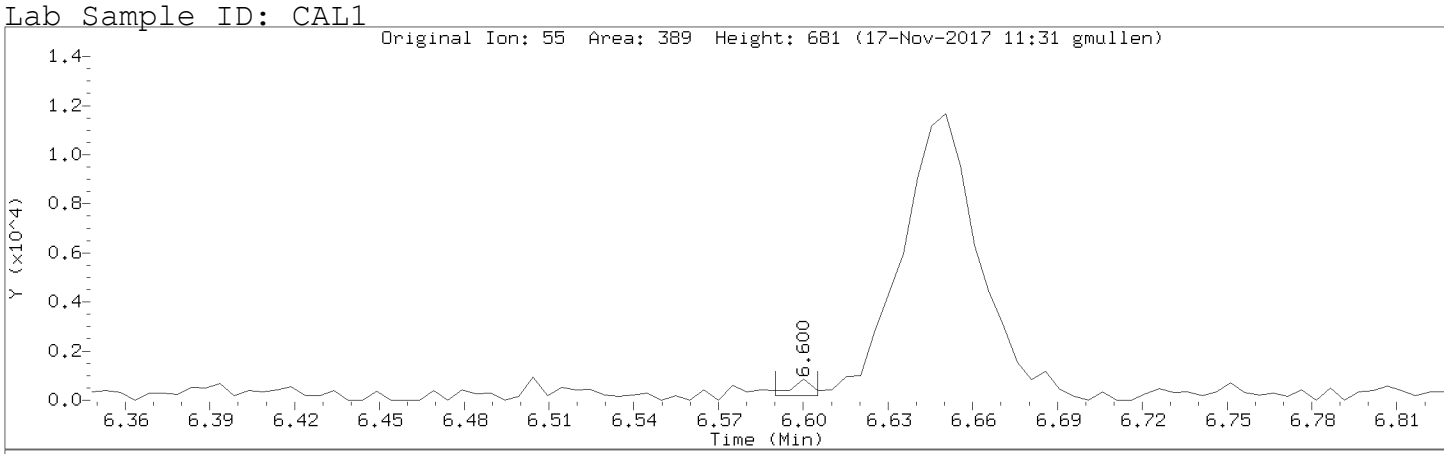

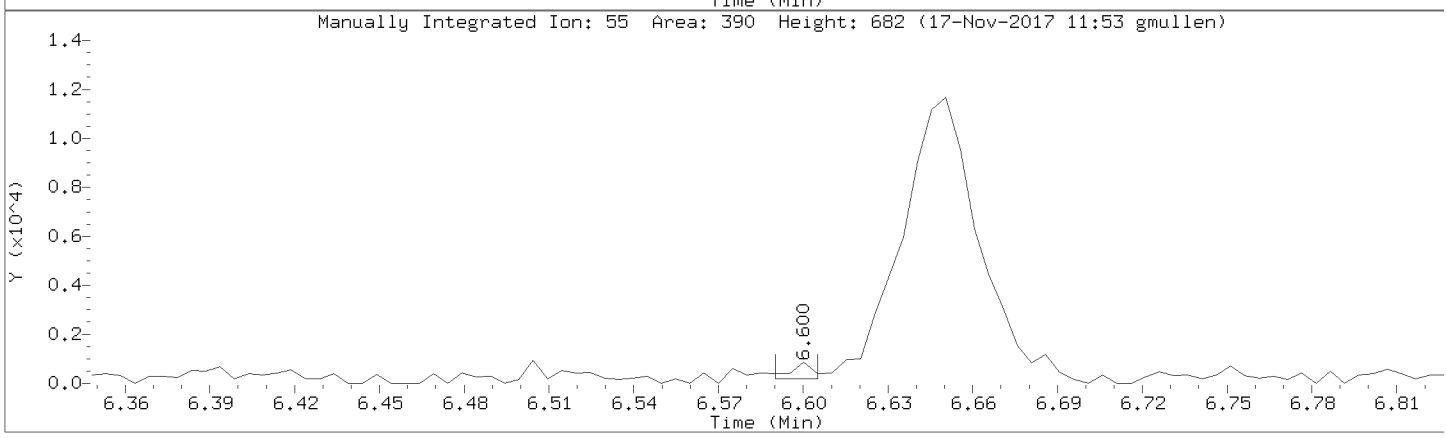

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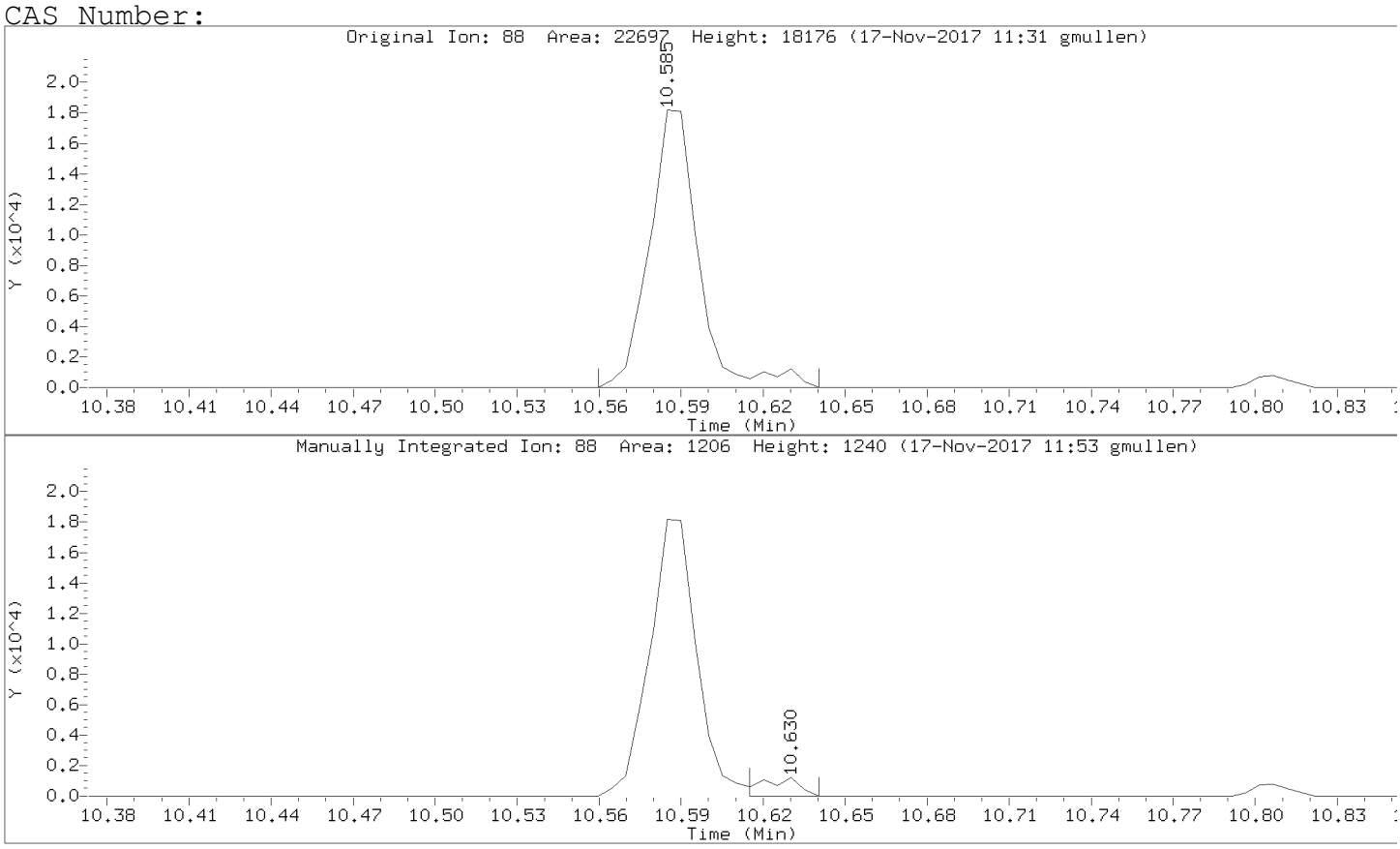
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: trans-1,4-Dichloro-2-butene Review Code:
CAS Number:



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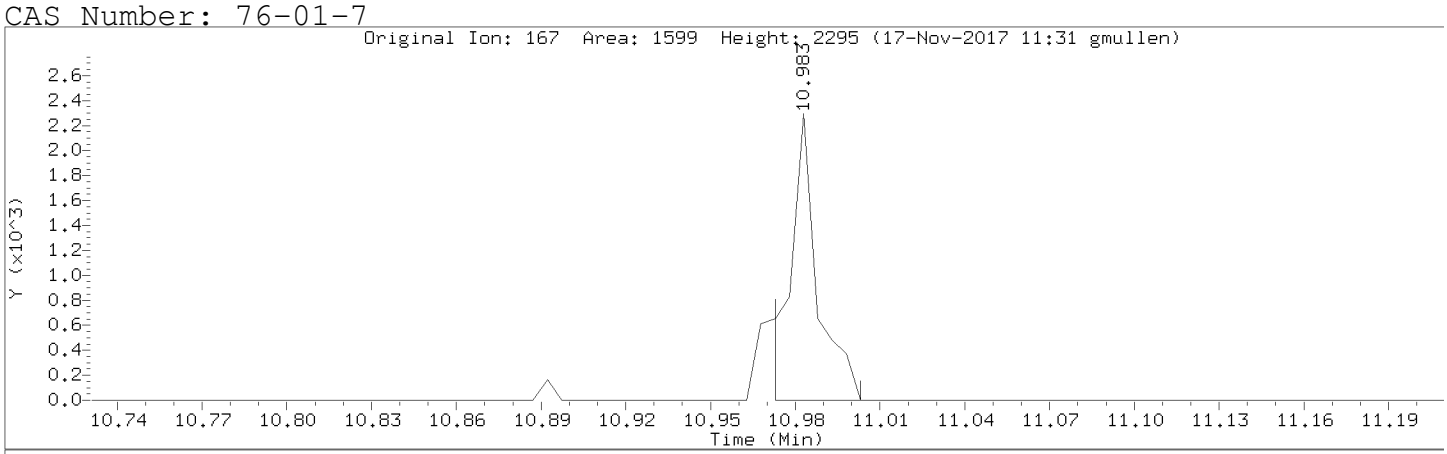
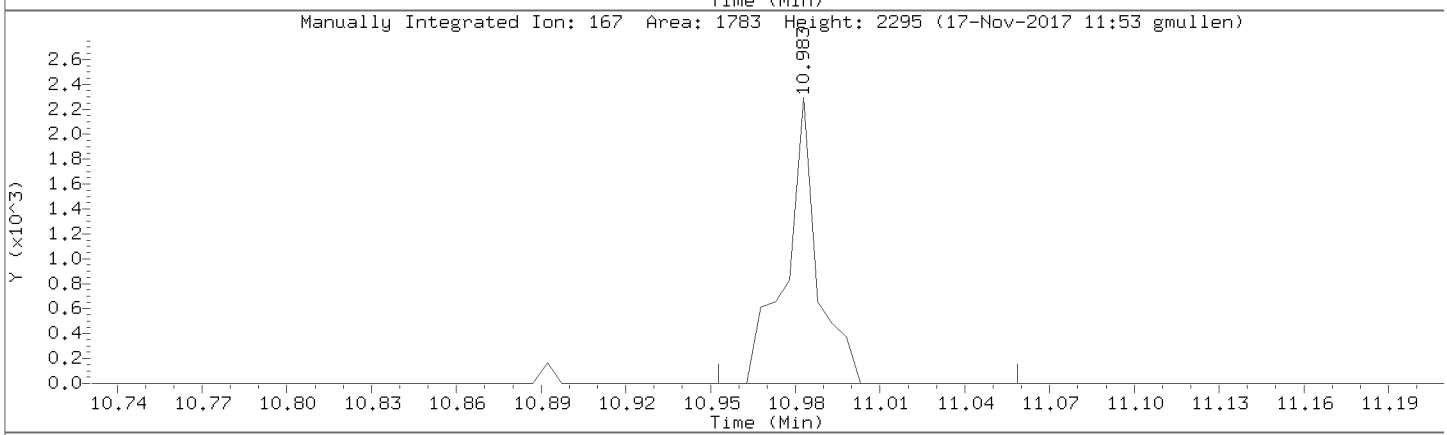
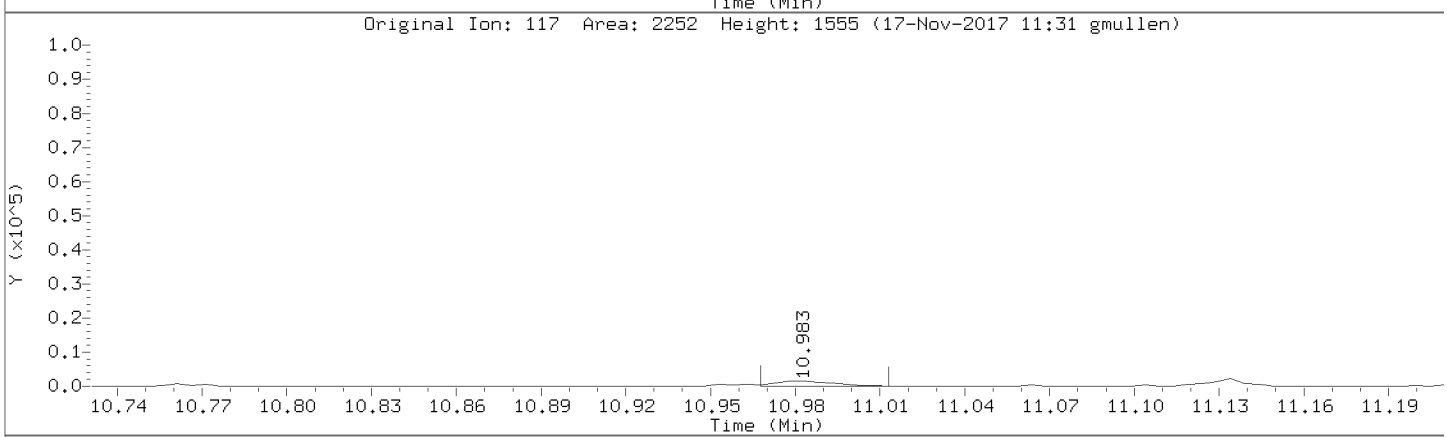
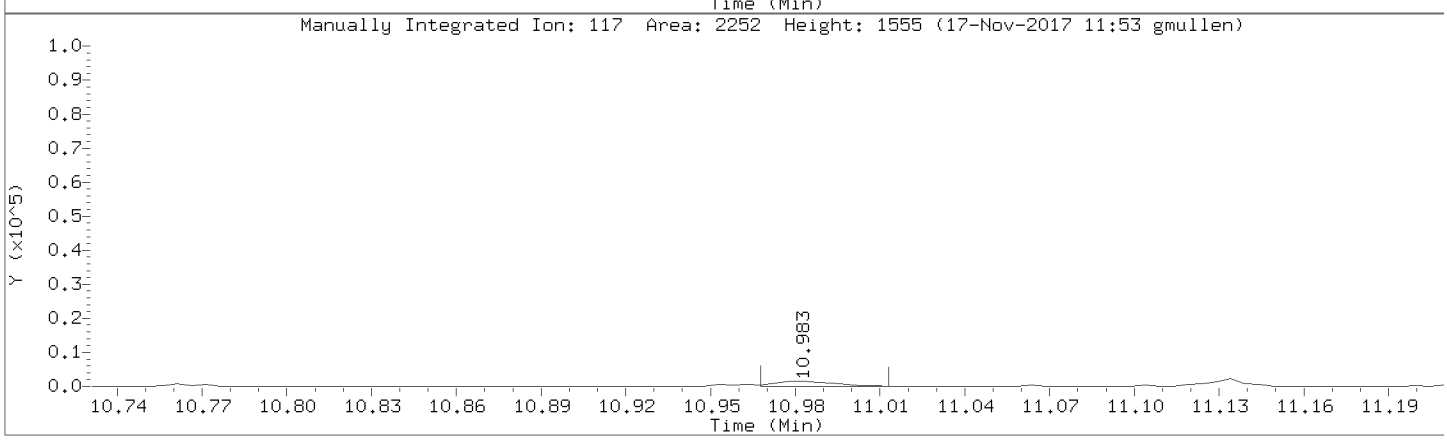
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Pentachloroethane Review Code: LT
CAS Number: 76-01-7









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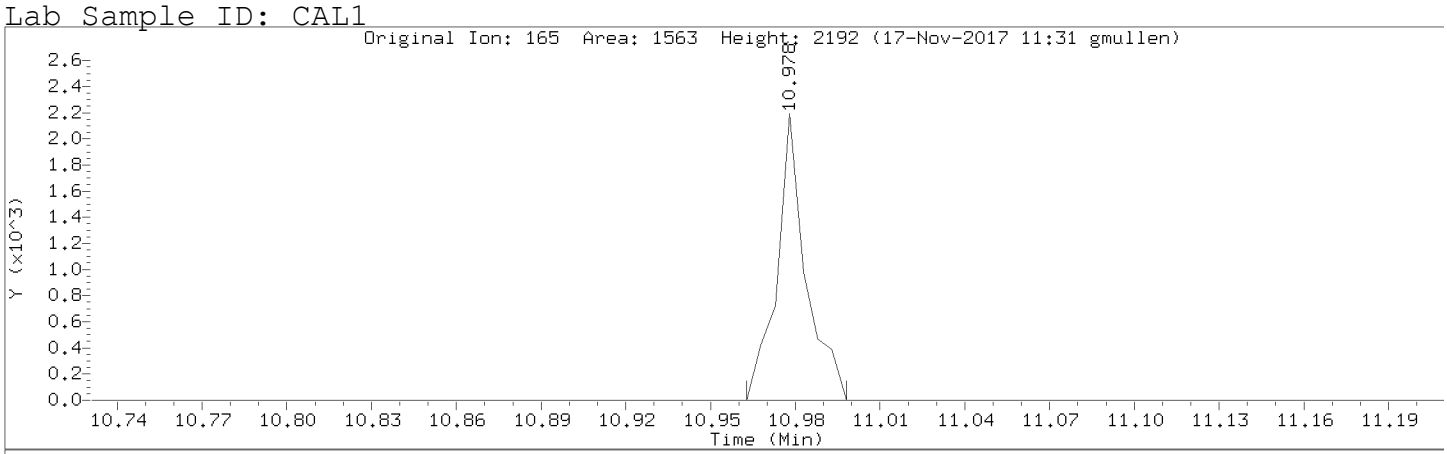
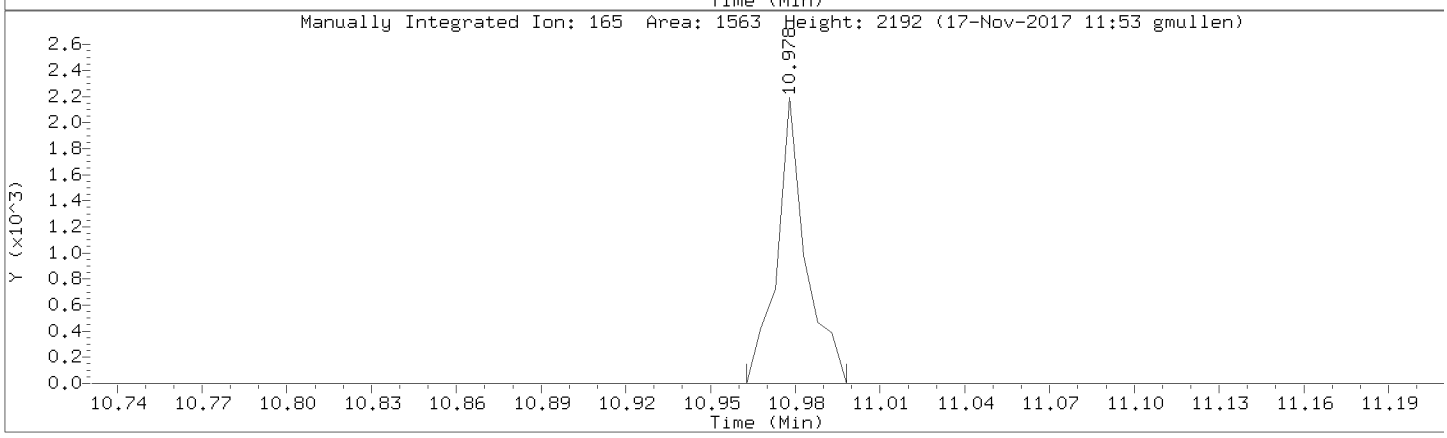
Lab Sample ID: CAL1





Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d06.d
Lab Smp Id: CAL2 Client Smp ID: CAL2
Inj Date : 17-NOV-2017 09:47
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal2,54398:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 09:47 Cal File: 1117d06.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	6565	1.00000	0.874
2 Chloromethane	50	1.894	1.894	(0.285)	9822	1.00000	0.940
3 Vinyl chloride	62	1.985	1.990	(0.299)	14924	1.00000	1.01
4 Bromomethane	94	2.342	2.338	(0.352)	8530	1.00000	1.21
5 Chloroethane	64	2.489	2.489	(0.374)	9625	1.00000	1.80(M)
6 Trichlorofluoromethane	101	2.650	2.650	(0.399)	13230	1.00000	0.942
7 1,1-Dichloroethene	96	3.249	3.244	(0.489)	6289	1.00000	1.49
8 Carbon disulfide	76	3.269	3.275	(0.492)	21387	1.00000	1.04
9 1,1,2-Trichlorotrifluoroethane	101	3.330	3.315	(0.501)	6349	1.00000	0.882(M)
10 Iodomethane	142	3.436	3.426	(0.517)	11648	1.00000	0.931
11 Acrolein	56	3.713	3.718	(0.558)	2760	1.00000	1.95(M)
12 Allyl chloride	41	3.894	3.894	(0.586)	12319	1.00000	0.969
13 Methylene Chloride	84	4.055	4.051	(0.610)	9798	1.00000	0.779
14 Acetone	43	4.136	4.146	(0.622)	2290	1.00000	0.197
15 trans-1,2-Dichloroethene	96	4.272	4.277	(0.642)	7181	1.00000	1.04(M)
16 Methyl Acetate	74	4.317	4.318	(0.649)	676	1.00000	0.945(M)
17 n-Hexane	57	4.398	4.388	(0.661)	12381	1.00000	0.922
18 Methyl-tert-butyl ether	73	4.448	4.449	(0.669)	14630	1.00000	1.02(M)
19 Acetonitrile	41	4.776	4.766	(0.718)	6162	10.0000	9.97
20 Chloroprene	53	5.043	5.048	(0.758)	11492	1.00000	0.869
21 1,1-Dichloroethane	63	5.068	5.073	(0.762)	13460	1.00000	0.890
22 Acrylonitrile	53	5.159	5.144	(0.776)	2385	1.00000	1.06(M)

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.395	5.396	(0.811)	30146	1.00000	0.962
	24 cis-1,2-Dichloroethene	96	5.693	5.688	(0.856)	7520	1.00000	0.984
	25 2,2-Dichloropropane	77	5.813	5.804	(0.874)	9399	1.00000	1.08
	26 Cyclohexane	84	5.894	5.889	(0.886)	9483	1.00000	0.996
	27 Bromochloromethane	128	5.909	5.894	(0.889)	2900	1.00000	0.851
	28 Chloroform	83	5.990	5.985	(0.901)	13604	1.00000	1.05
	29 Carbon tetrachloride	117	6.116	6.111	(0.856)	8984	1.00000	0.922
	30 Tetrahydrofuran	42	6.181	6.151	(0.930)	4015	1.00000	1.55(M)
	31 1,1,1-Trichloroethane	97	6.181	6.187	(0.930)	11253	1.00000	1.02
$	32 Dibromofluoromethane (S)	113	6.171	6.166	(0.928)	405182	50.0000	50.0
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	10247	1.00000	1.00
	34 2-Butanone (MEK)	43	6.322	6.312	(0.951)	2562	1.00000	0.644
	35 Benzene	78	6.559	6.559	(0.918)	28294	1.00000	1.04
	36 Propionitrile	54	6.599	6.600	(0.992)	7259	10.0000	9.31
	37 Methacrylonitrile	41	6.625	6.620	(0.996)	34149	10.0000	9.26
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	389539	50.0000	
	39 1,2-Dichloroethane	62	6.761	6.756	(0.946)	9009	1.00000	0.914
	40 Isobutanol	43	6.786	6.786	(1.020)	4853	21.0000	22.2
	41 Methylcyclohexane	83	7.098	7.098	(0.994)	9756	1.00000	0.908
	42 Trichloroethene	130	7.108	7.108	(0.995)	5800	1.00000	0.787
*	43 1,4-Difluorobenzene (IS)	114	7.143	7.144	(1.000)	1166469	50.0000	
	44 Dibromomethane	93	7.486	7.491	(1.048)	4284	1.00000	1.01
	45 1,2-Dichloropropane	63	7.597	7.592	(1.063)	8606	1.00000	1.03
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	8655	1.00000	0.935
	47 Methyl methacrylate	41	7.803	7.809	(1.092)	11685	2.00000	2.00
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.844	(1.099)	538	20.0000	15.8
	49 2-Chloroethyl vinyl ether	63	8.221	8.227	(1.151)	7653	2.00000	1.76(M)
	50 cis-1,3-Dichloropropene	75	8.287	8.287	(1.160)	9823	1.00000	0.899
$	51 Toluene-d8 (S)	98	8.488	8.489	(1.188)	1342692	50.0000	50.2
	52 Toluene	91	8.544	8.539	(1.196)	27549	1.00000	0.961
	53 Tetrachloroethene	164	8.907	8.902	(0.910)	5890	1.00000	0.884
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	5507	1.00000	0.975
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	8560	1.00000	0.953
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	5516	1.00000	0.946
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	4740	1.00000	0.969
	58 Dibromochloromethane	129	9.219	9.214	(0.942)	5689	1.00000	0.886
	59 1,3-Dichloropropane	76	9.294	9.300	(0.950)	7551	1.00000	0.897
	60 1,2-Dibromoethane (EDB)	107	9.415	9.411	(1.318)	5038	1.00000	0.955
	61 2-Hexanone	43	9.577	9.577	(0.978)	5167	1.00000	1.26
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	560274	50.0000	
	63 Chlorobenzene	112	9.798	9.799	(1.001)	17228	1.00000	0.930
	64 Ethylbenzene	91	9.813	9.814	(1.003)	29287	1.00000	0.925
	65 1,1,1,2-Tetrachloroethane	131	9.839	9.844	(1.005)	6510	1.00000	0.938
	66 m&p-Xylene	106	9.914	9.914	(1.013)	20995	2.00000	1.73
	67 o-Xylene	106	10.206	10.207	(1.043)	9267	1.00000	0.836
	68 Styrene	104	10.242	10.242	(1.046)	15929	1.00000	0.879
	69 Bromoform	173	10.262	10.267	(1.048)	3681	1.00000	0.848
	70 Isopropylbenzene (Cumene)	105	10.403	10.408	(0.926)	26084	1.00000	0.966
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	464966	50.0000	50.6
	72 trans-1,4-Dichloro-2-butene	88	10.619	10.625	(0.945)	4025	2.00000	(H)
	73 Bromobenzene	156	10.655	10.655	(0.948)	7036	1.00000	0.951
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	31478	1.00000	0.972
	75 1,1,2,2-Tetrachloroethane	83	10.710	10.705	(0.953)	6208	1.00000	1.09
	76 2-Chlorotoluene	91	10.766	10.761	(0.958)	19446	1.00000	0.959

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	19930	1.00000	0.964
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	1490	1.00000	1.03
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	17695	1.00000	0.959
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	10141	1.00000	0.866
81 Pentachloroethane	167	10.982	10.982	(0.978)	3963	1.00000	0.881
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	19551	1.00000	0.981
83 sec-Butylbenzene	105	11.058	11.063	(0.984)	21858	1.00000	0.883
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	17329	1.00000	0.870
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	11068	1.00000	0.976
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	469508	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	10860	1.00000	0.941
88 n-Butylbenzene	91	11.365	11.370	(1.012)	19840	1.00000	1.05
89 1,2-Dichlorobenzene	146	11.481	11.481	(1.022)	10509	1.00000	1.06
90 1,2-Dibromo-3-chloropropane	157	11.922	11.927	(1.061)	1426	1.00000	1.01
91 Hexachloro-1,3-butadiene	225	12.287	12.287	(1.094)	3071	1.00000	0.994
92 1,2,4-Trichlorobenzene	180	12.322	12.327	(1.097)	4400	1.00000	0.906
93 Naphthalene	128	12.549	12.549	(1.117)	11017	1.00000	1.15
94 1,2,3-Trichlorobenzene	180	12.660	12.675	(1.127)	3220	1.00000	0.891

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d06.d
Lab Smp Id: CAL2 Client Smp ID: CAL2
Inj Date : 17-NOV-2017 09:47
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal2,54437:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:14 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 09:47 Cal File: 1117d06.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

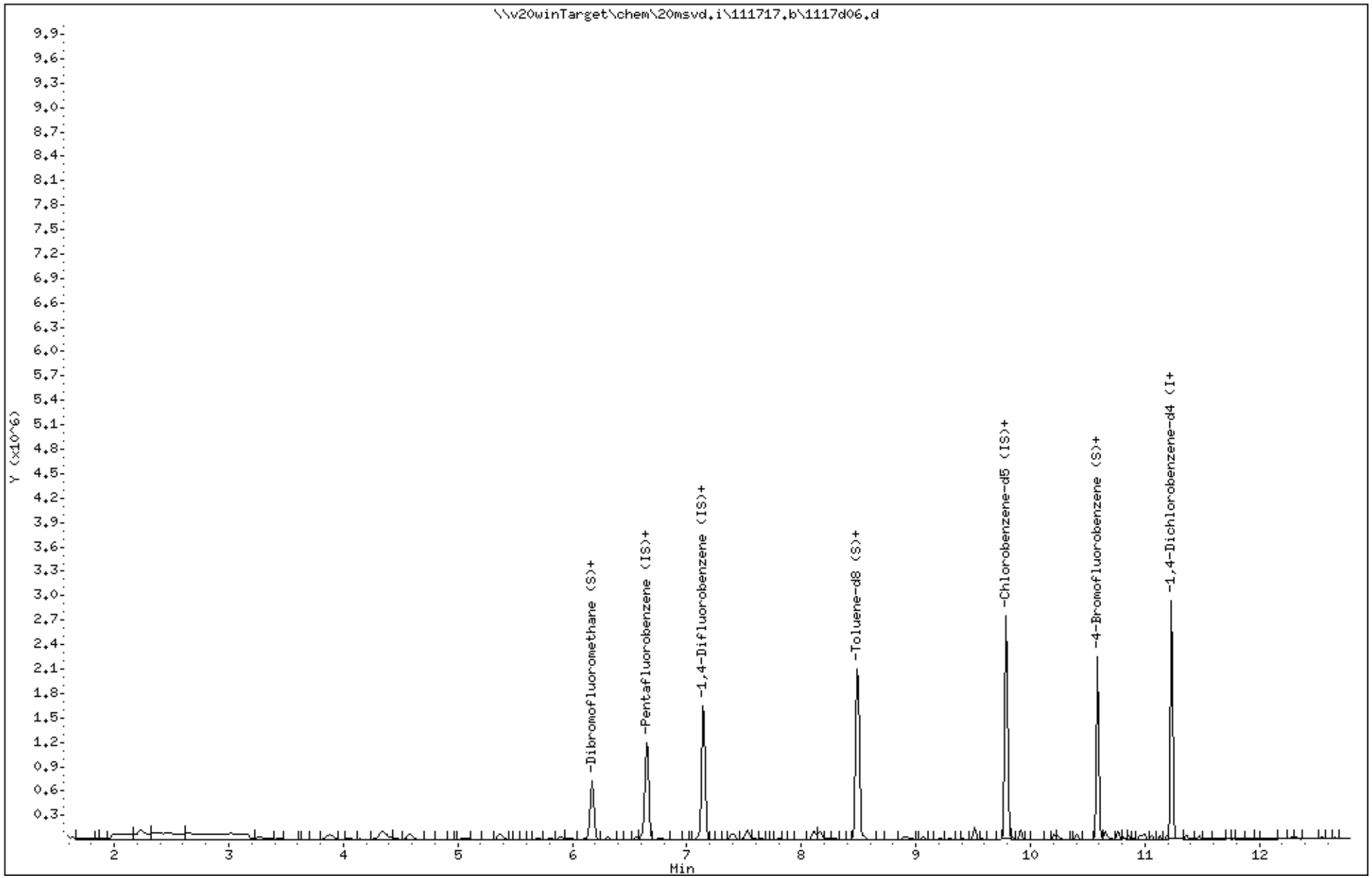
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Haloether 229	83	2.232	2.237	(0.336)	37771	5.00000	6.11
2 Haloether 406	85	3.864	3.879	(0.581)	52402	5.00000	4.94(M)
3 Isoflurane	117	4.327	4.332	(0.651)	18112	5.00000	5.19
4 Haloether 508	97	4.358	4.357	(0.655)	17332	5.00000	5.29(M)
5 Enflurane	117	4.579	4.584	(0.689)	38793	5.00000	5.43
6 Halomar	81	5.370	5.360	(0.808)	80594	5.00000	5.15
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	389539	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.143	7.143	(1.000)	1166469	50.0000	
7 Haloether 421	67	7.400	7.405	(1.036)	72317	5.00000	5.19
8 Haloether 427	151	7.531	7.526	(1.054)	50677	5.00000	5.16
11 Haloether 428	117	8.111	8.111	(1.135)	49294	5.00000	4.70
12 Methoxyflurane	81	8.166	8.161	(1.143)	105291	5.00000	5.05
13 Haloether 528	211	9.516	9.516	(1.332)	87071	5.00000	4.92
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	561497	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.239	(1.000)	469508	50.0000	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d06.d
Date : 17-NOV-2017 09:47
Client ID: CAL2
Instrument: 20msvd.i
Sample Info: CAL2,54398:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



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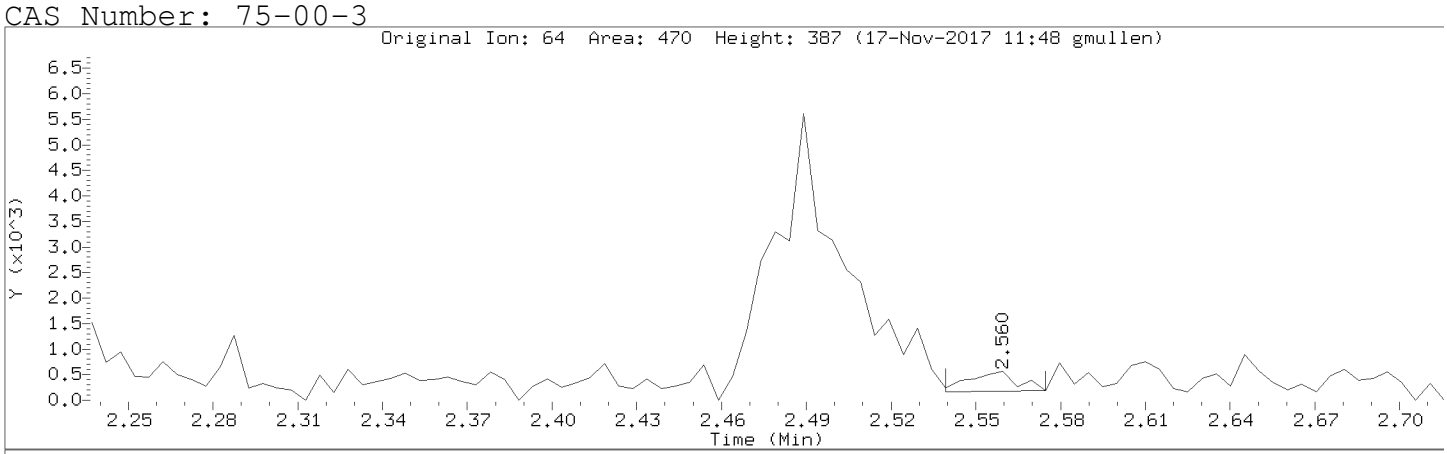
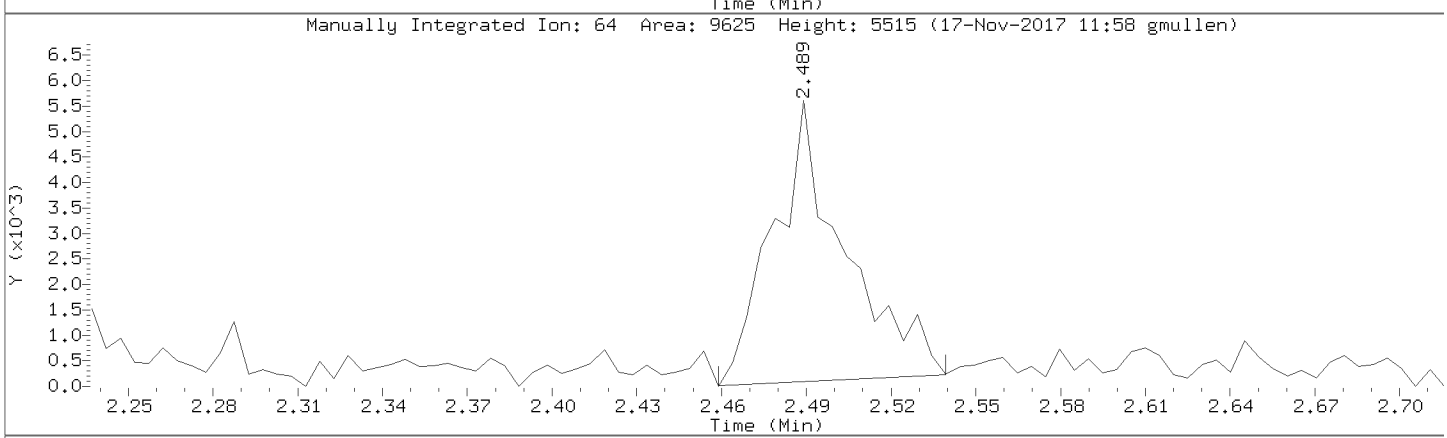
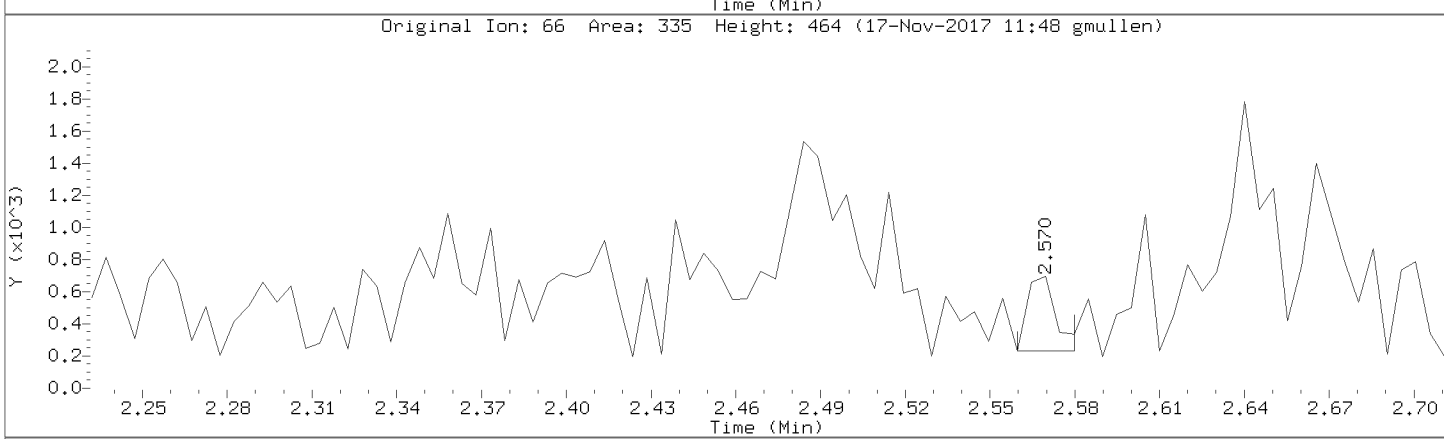
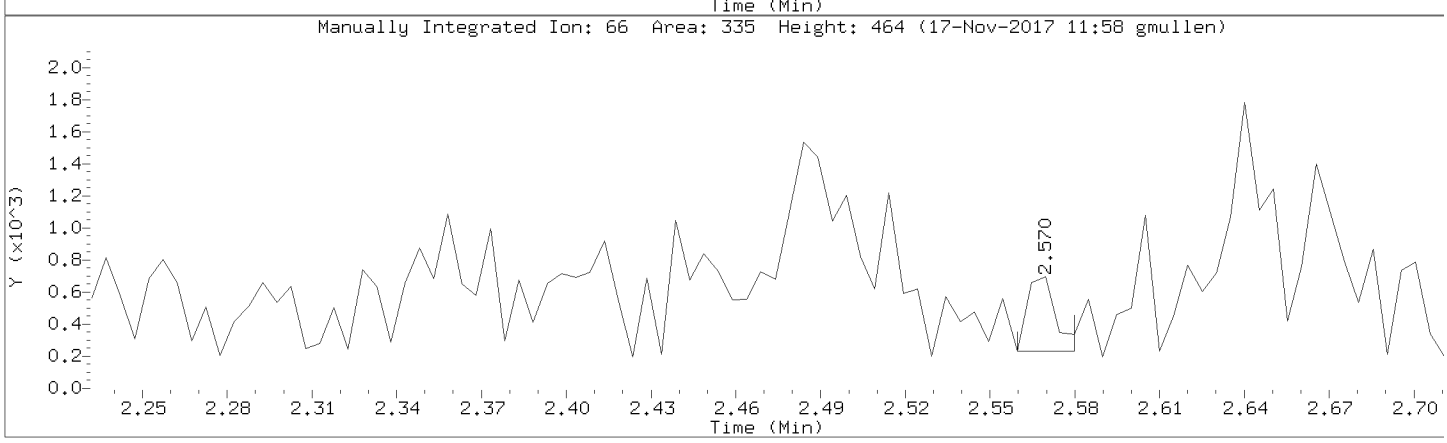
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Chloroethane Review Code:
CAS Number: 75-00-3









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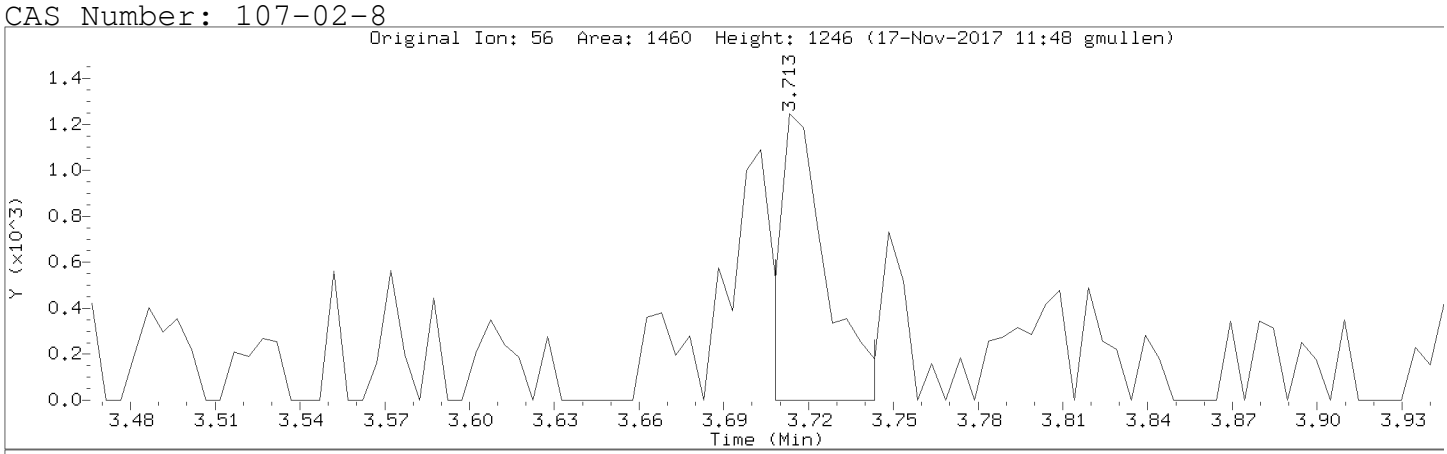
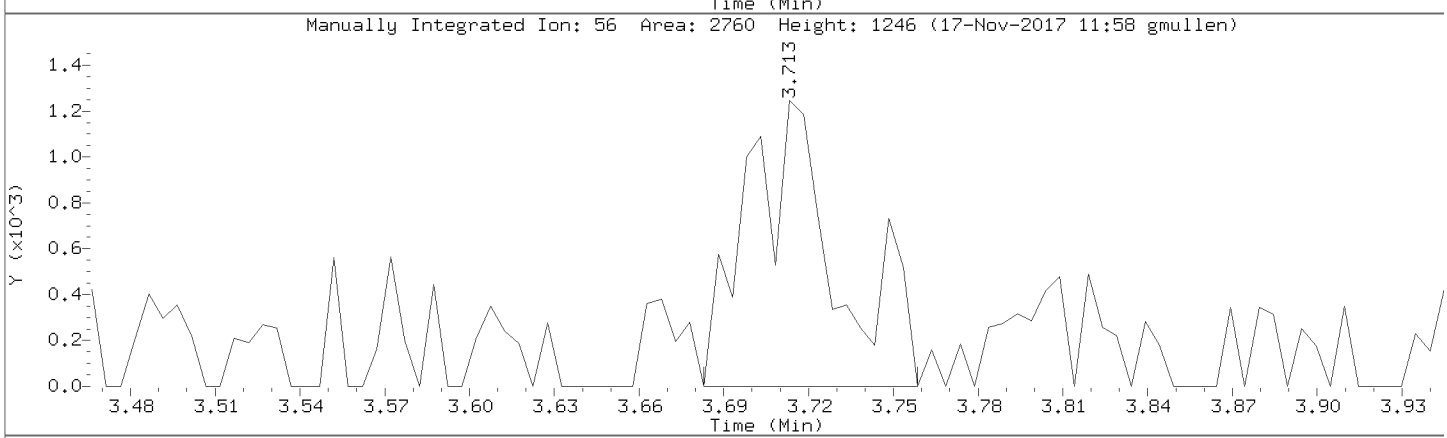
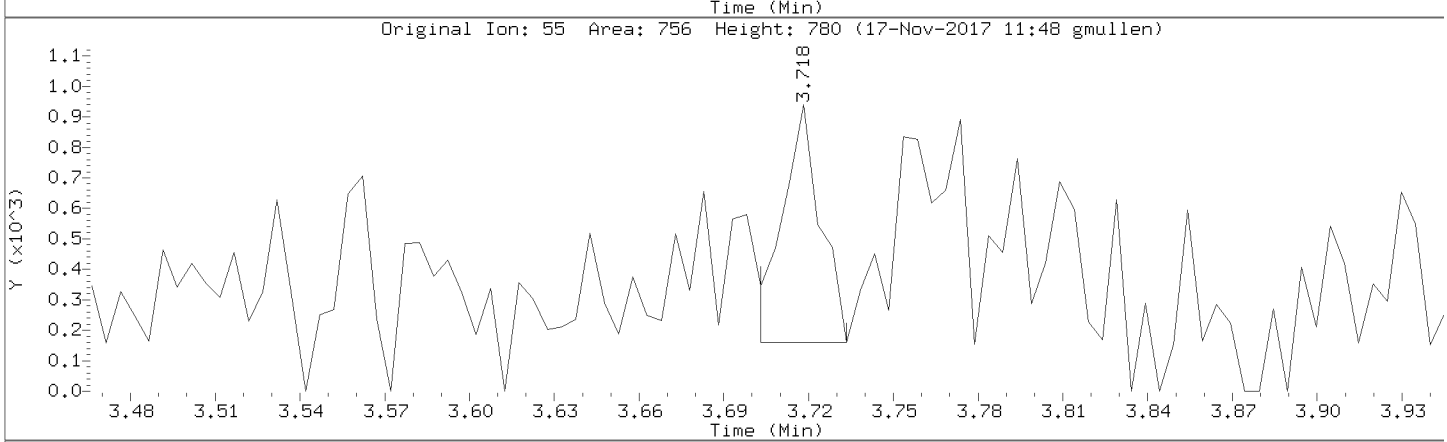
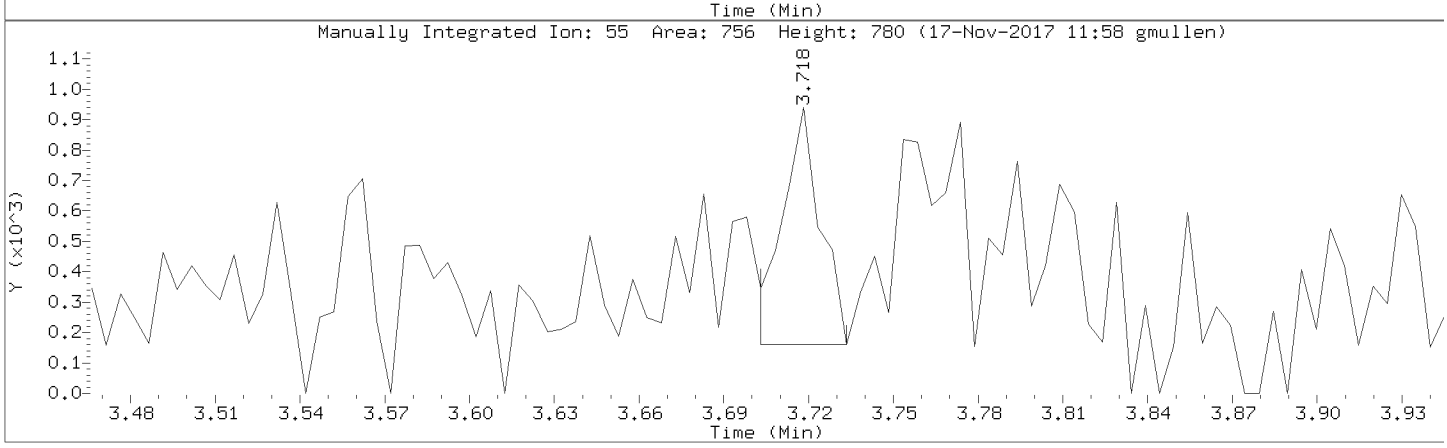
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Acrolein Review Code:
CAS Number: 107-02-8









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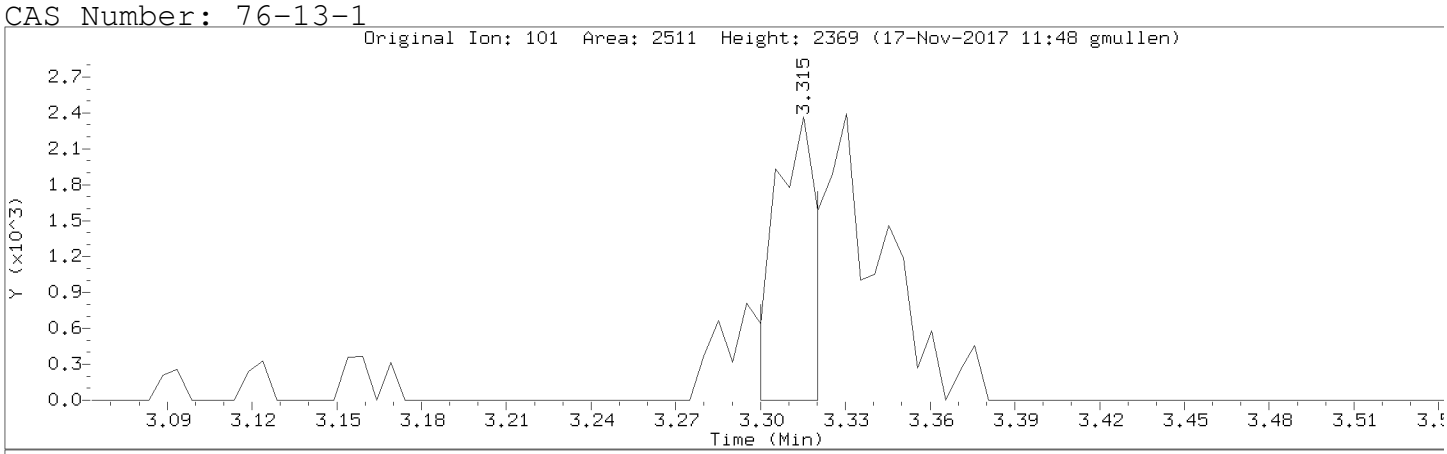
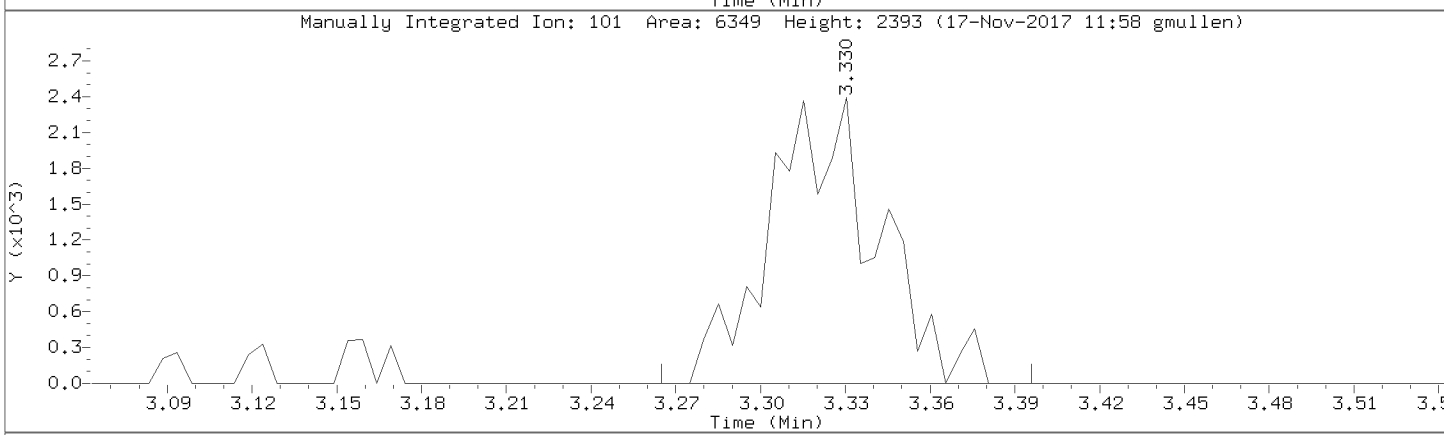
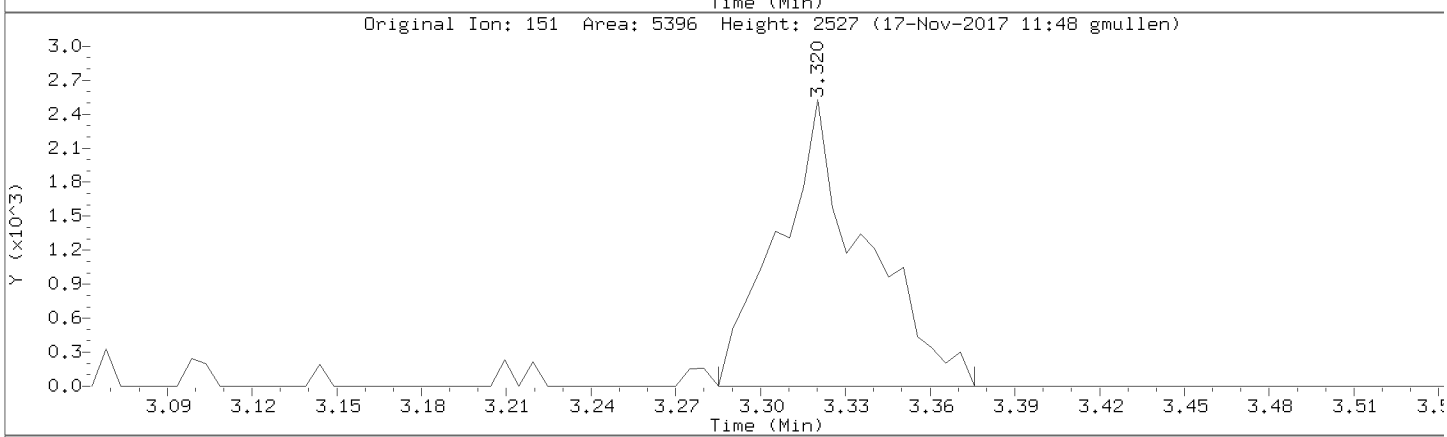
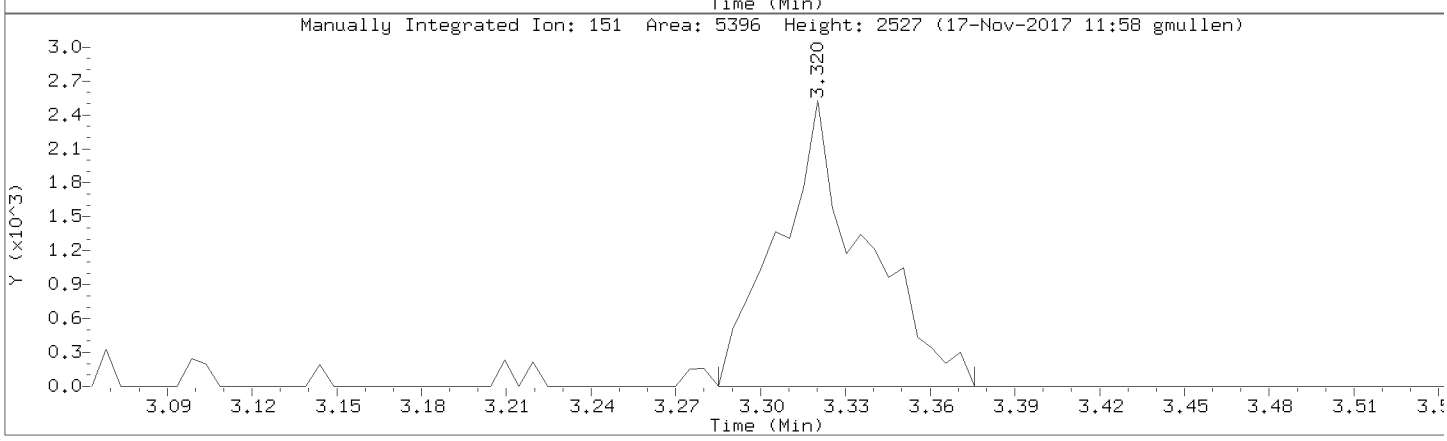
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 1,1,2-Trichlorotrifluoroethane Review Code: LT
CAS Number: 76-13-1









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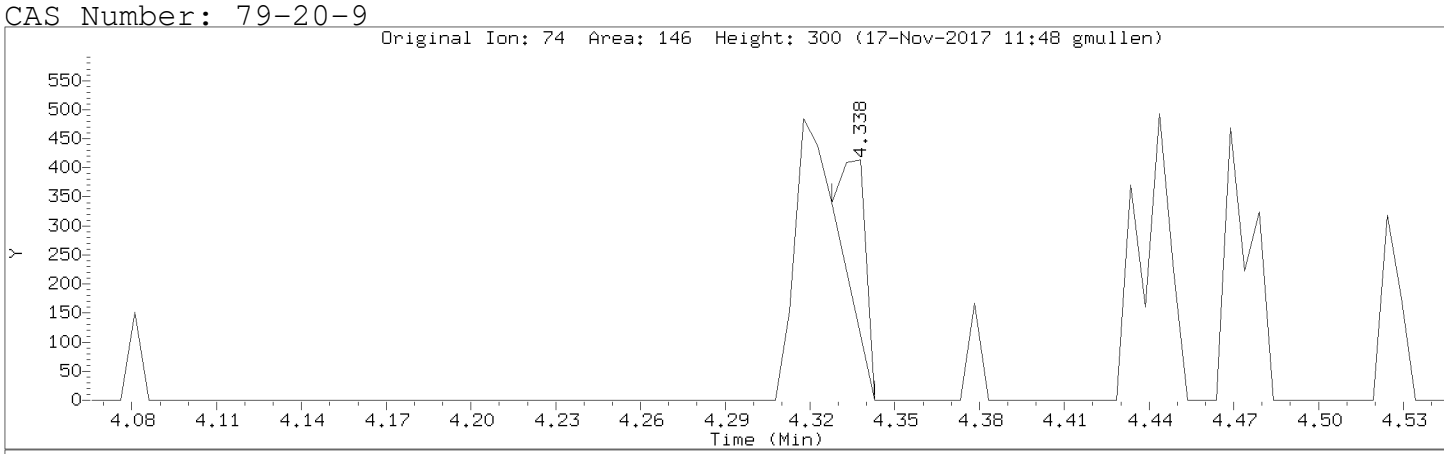
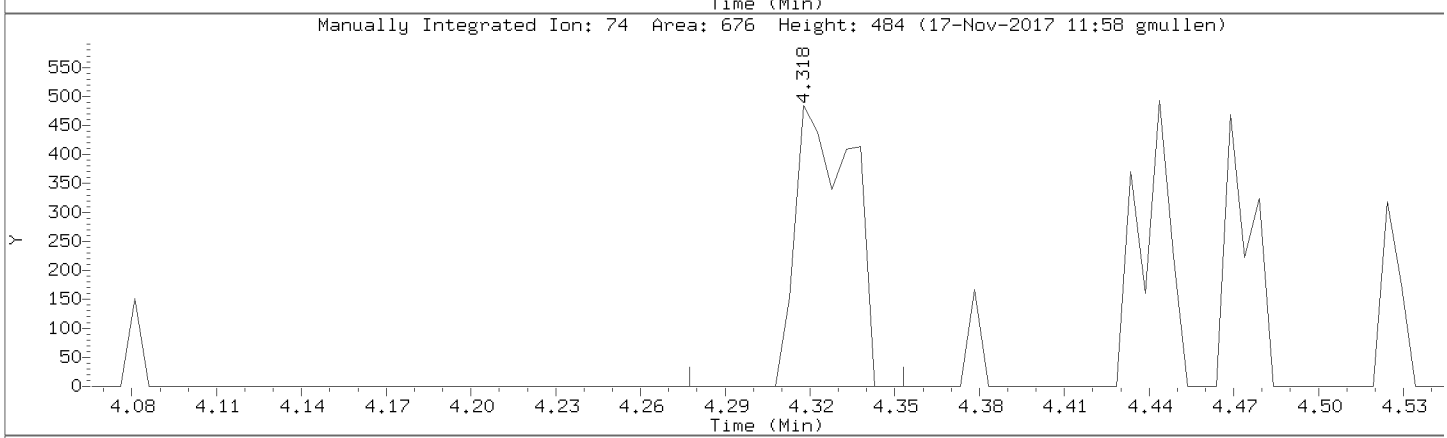
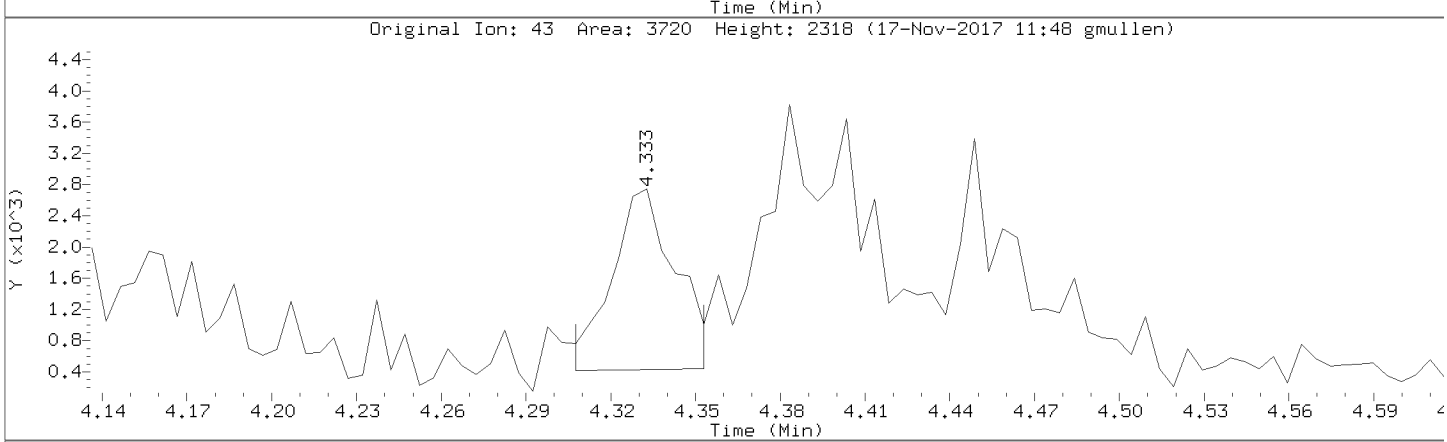
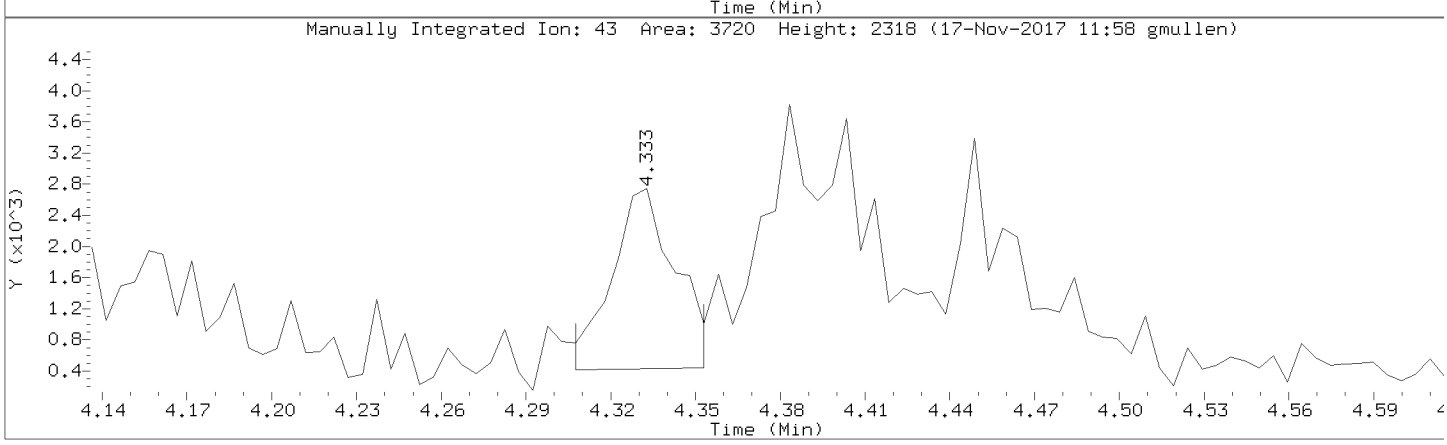
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Methyl Acetate Review Code: LT
CAS Number: 79-20-9









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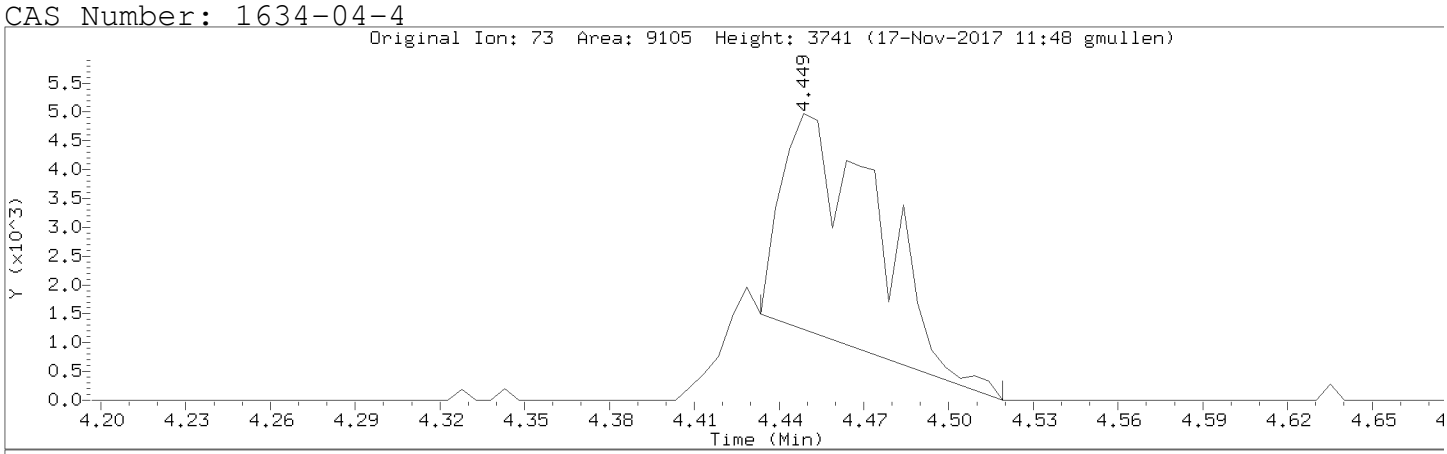
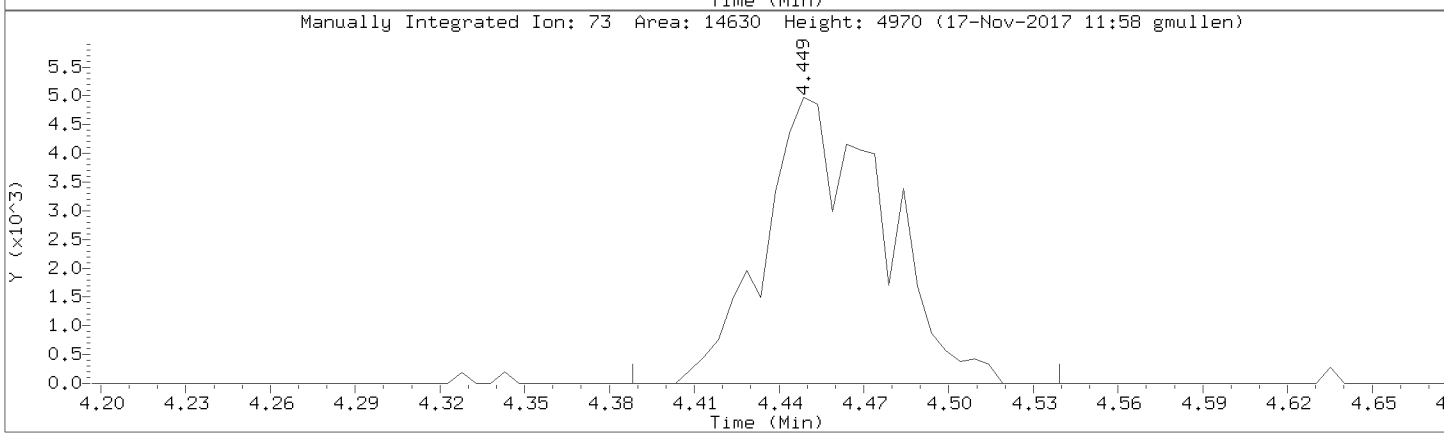
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Methyl-tert-butyl ether Review Code: LT
CAS Number: 1634-04-4





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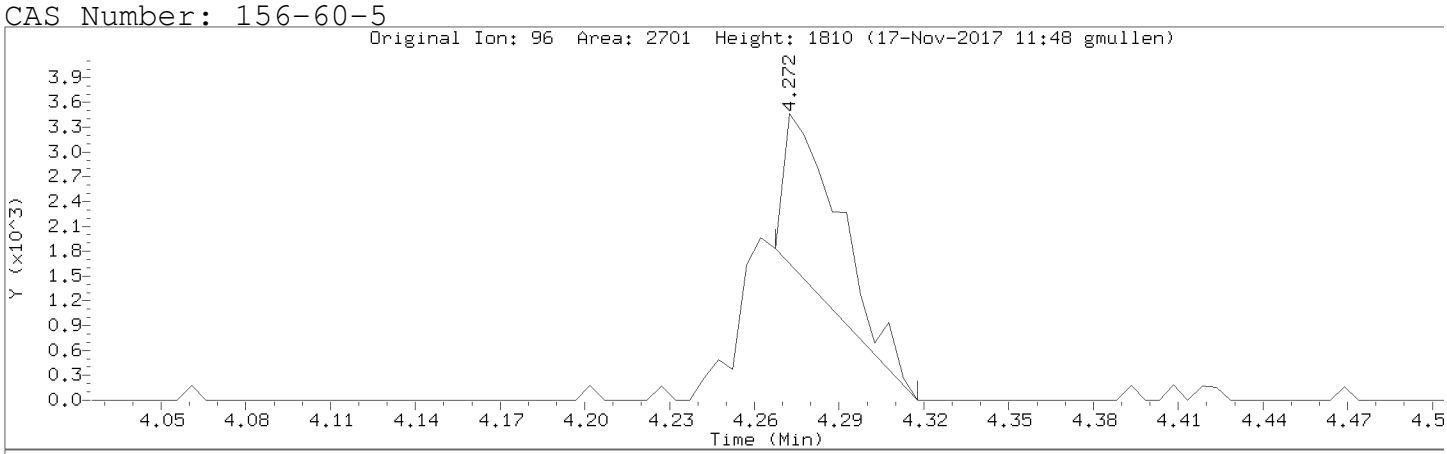
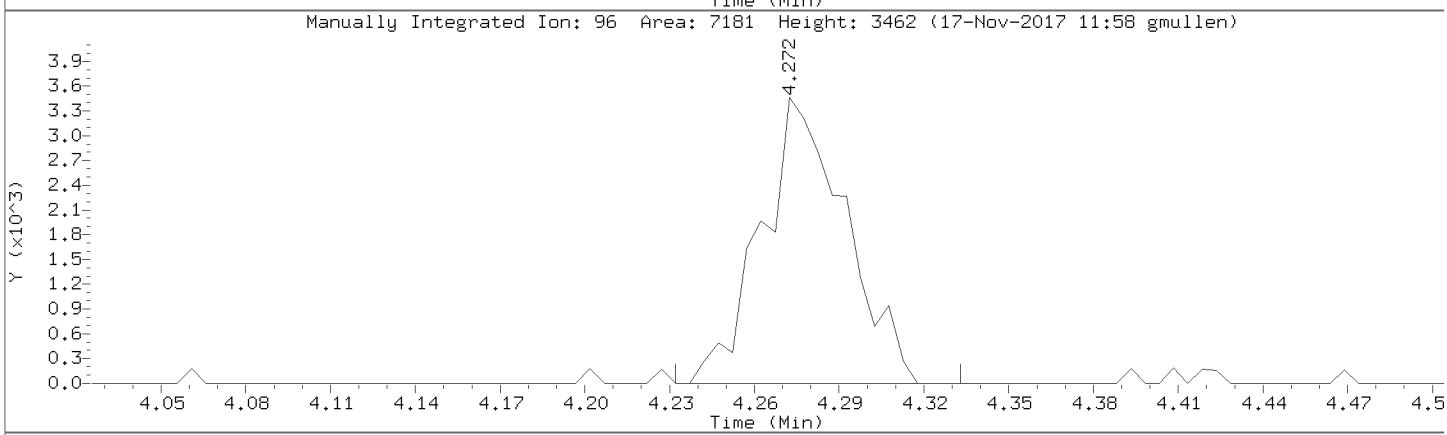
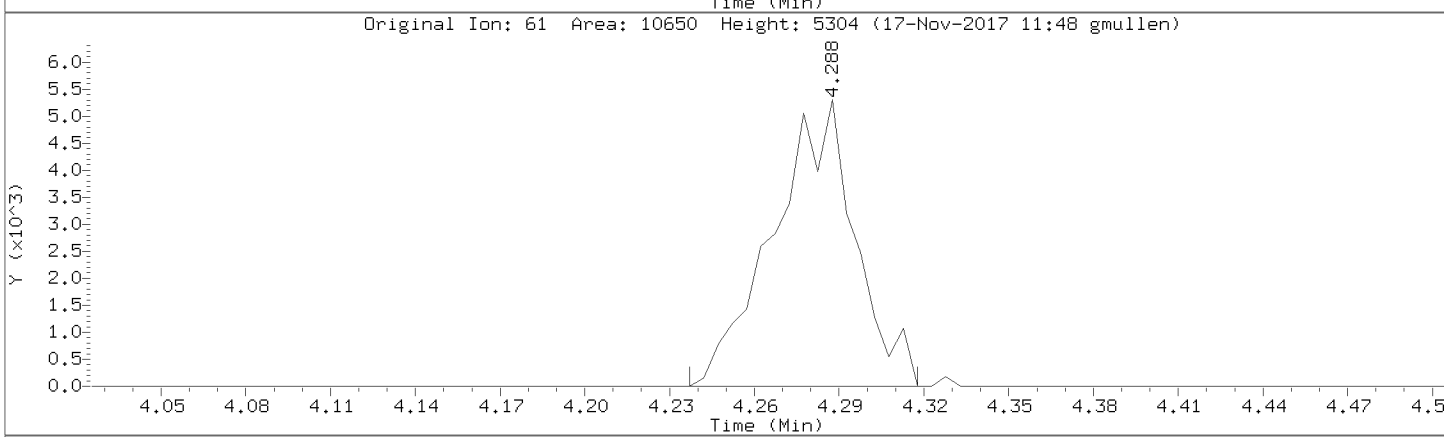
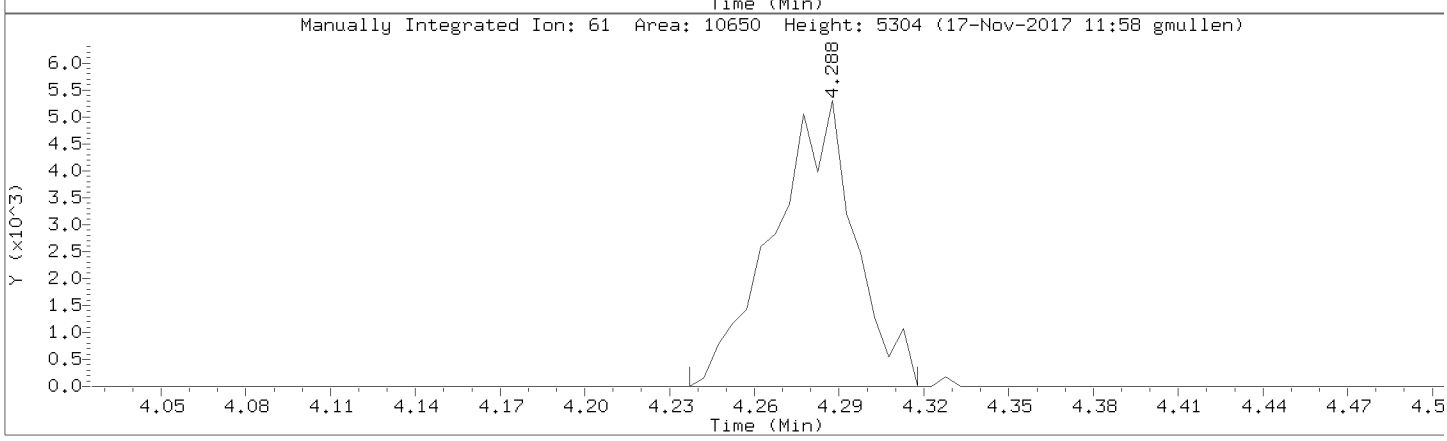
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: trans-1,2-Dichloroethene Review Code: LT
CAS Number: 156-60-5









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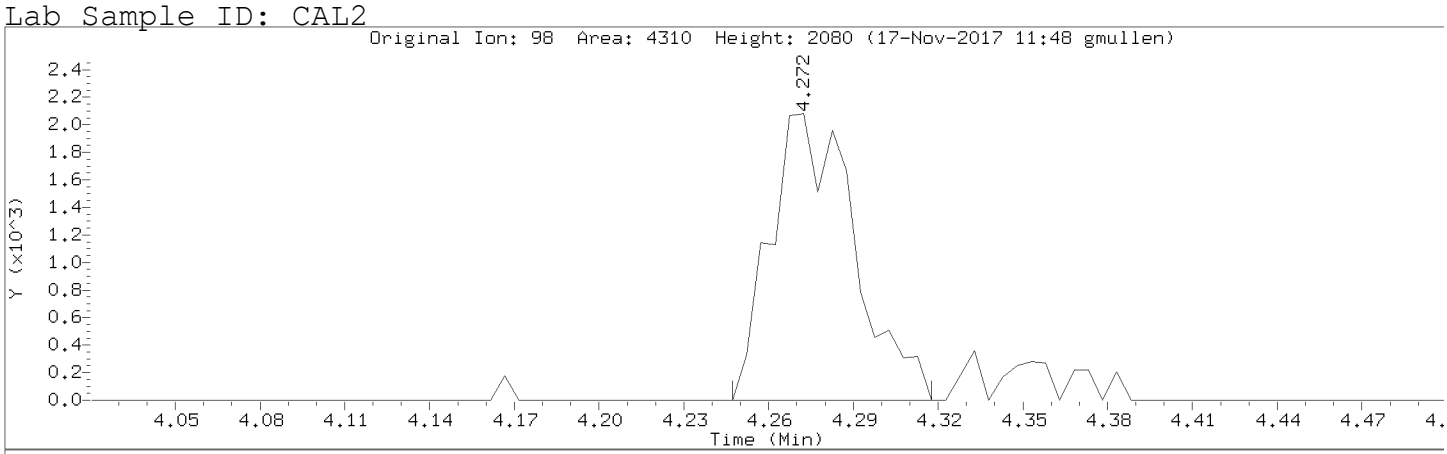
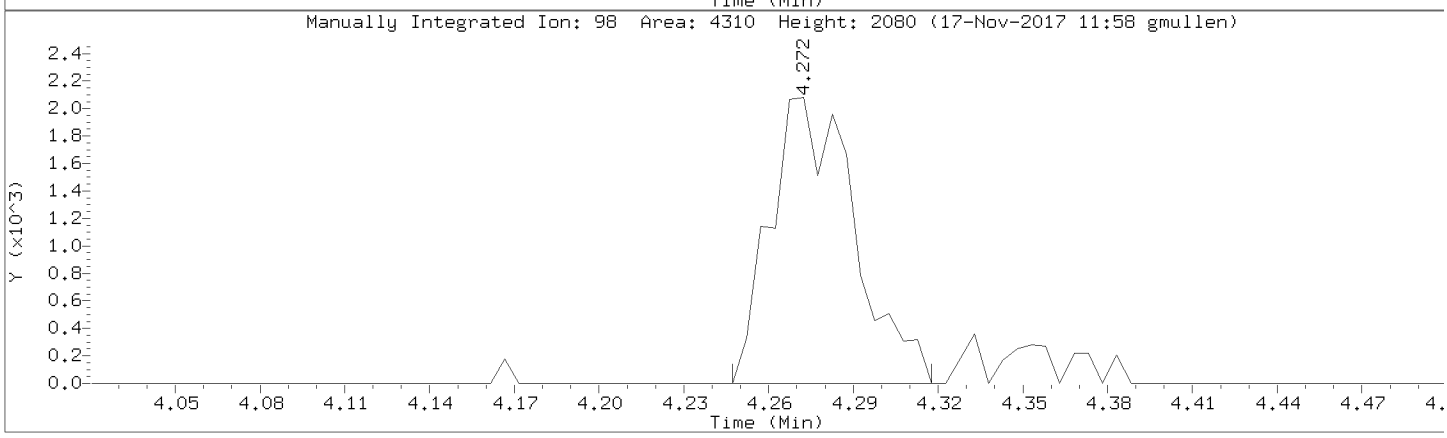
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2





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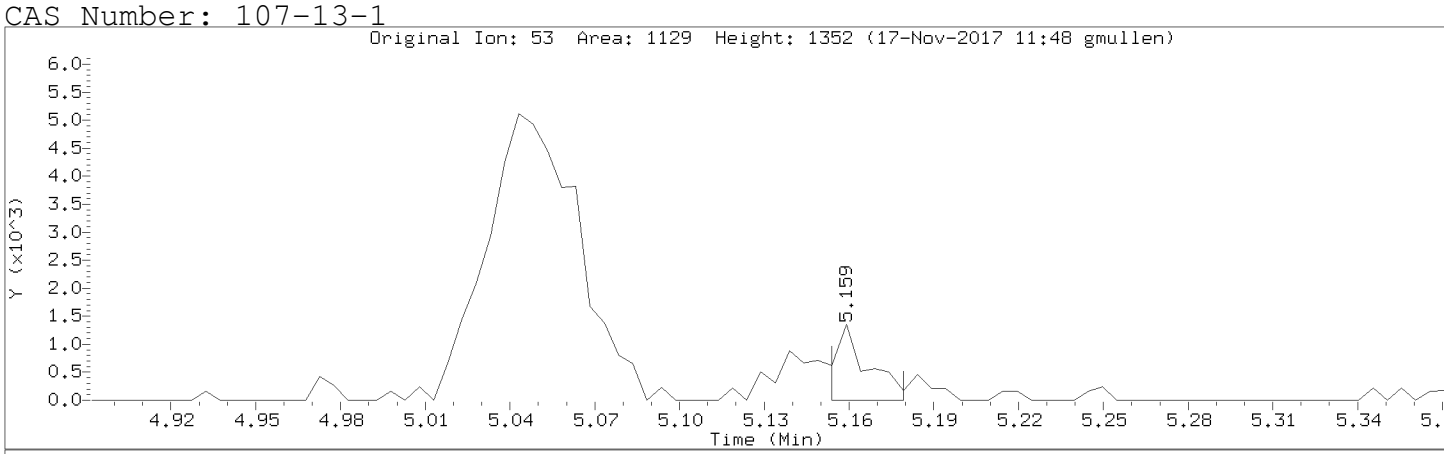
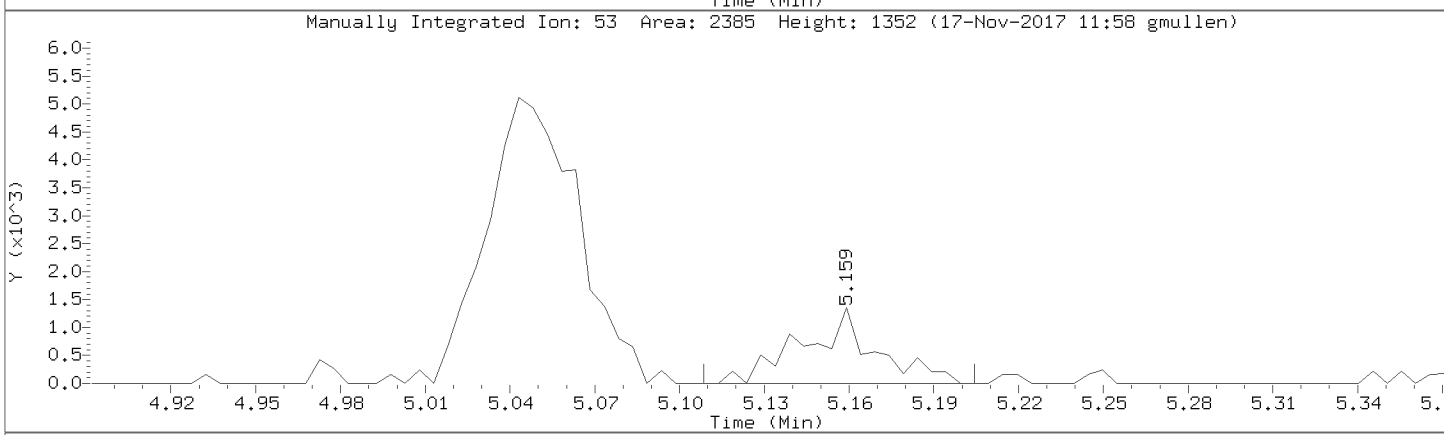
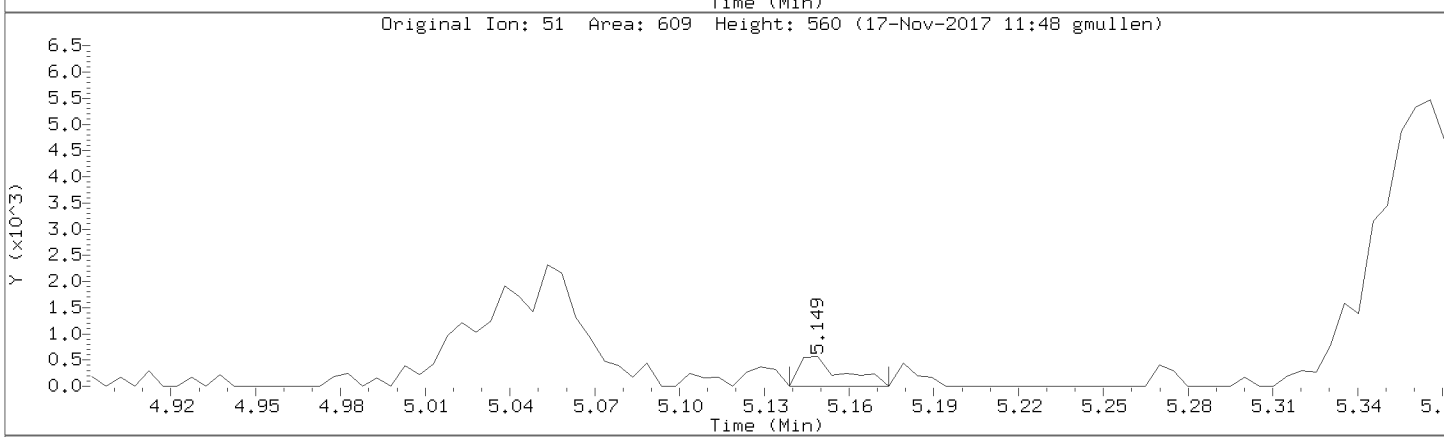
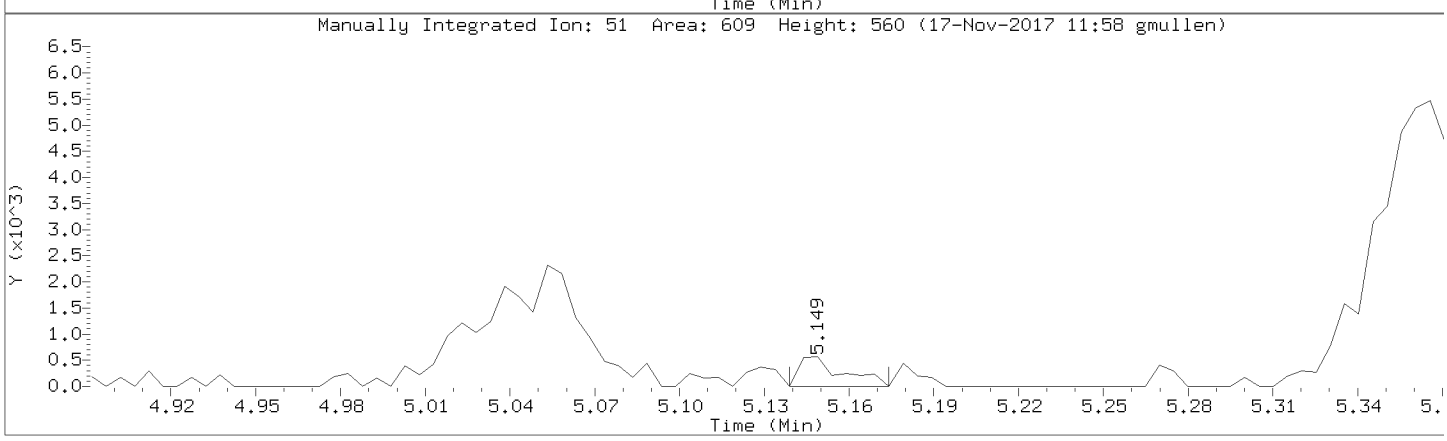
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Acrylonitrile Review Code: LT
CAS Number: 107-13-1









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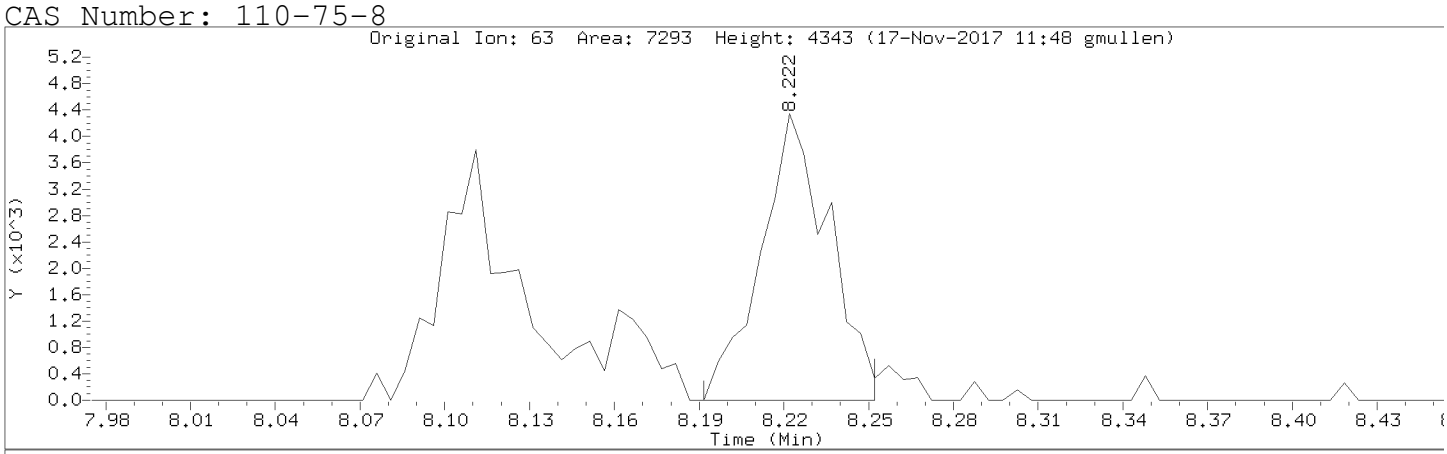
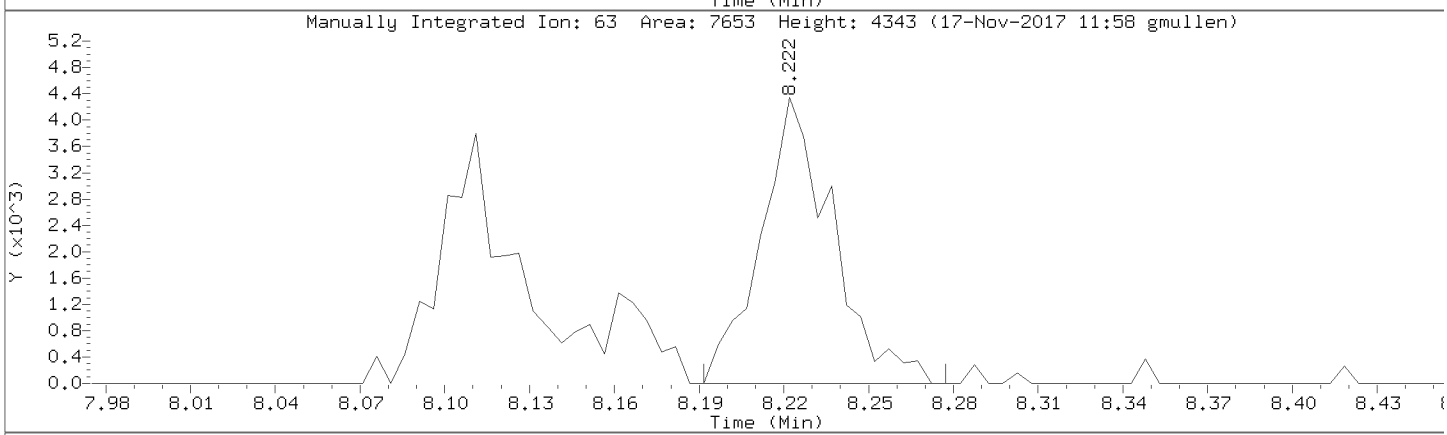
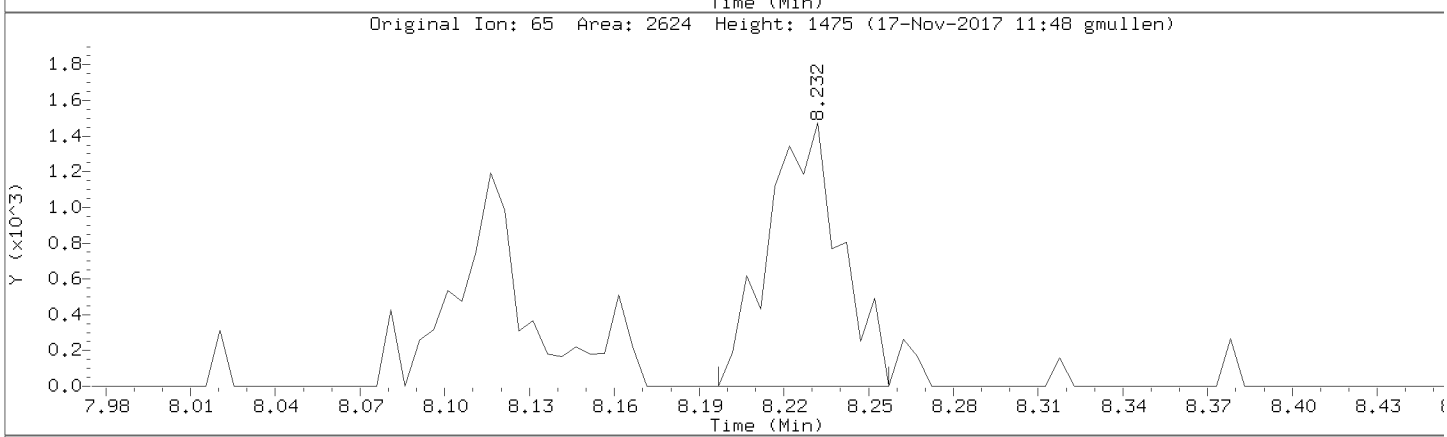
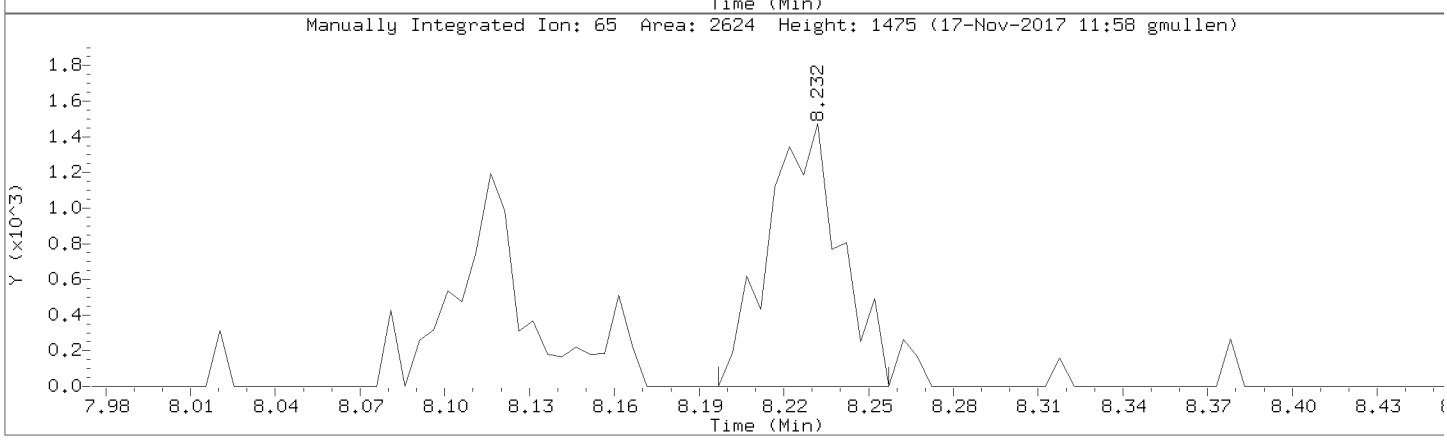
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 2-Chloroethyl vinyl ether Review Code: LT
CAS Number: 110-75-8









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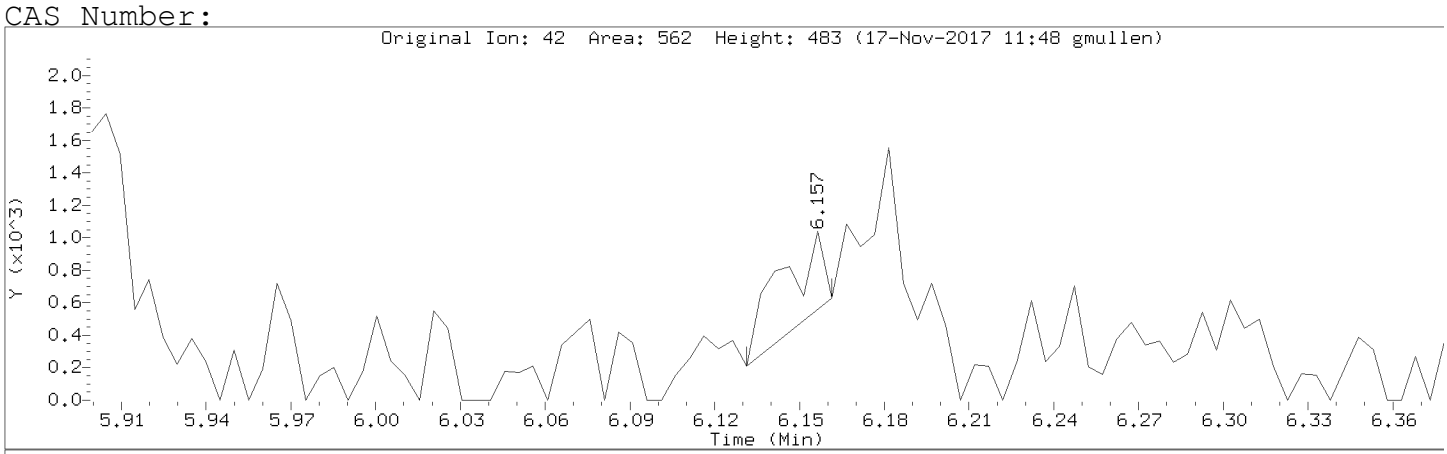
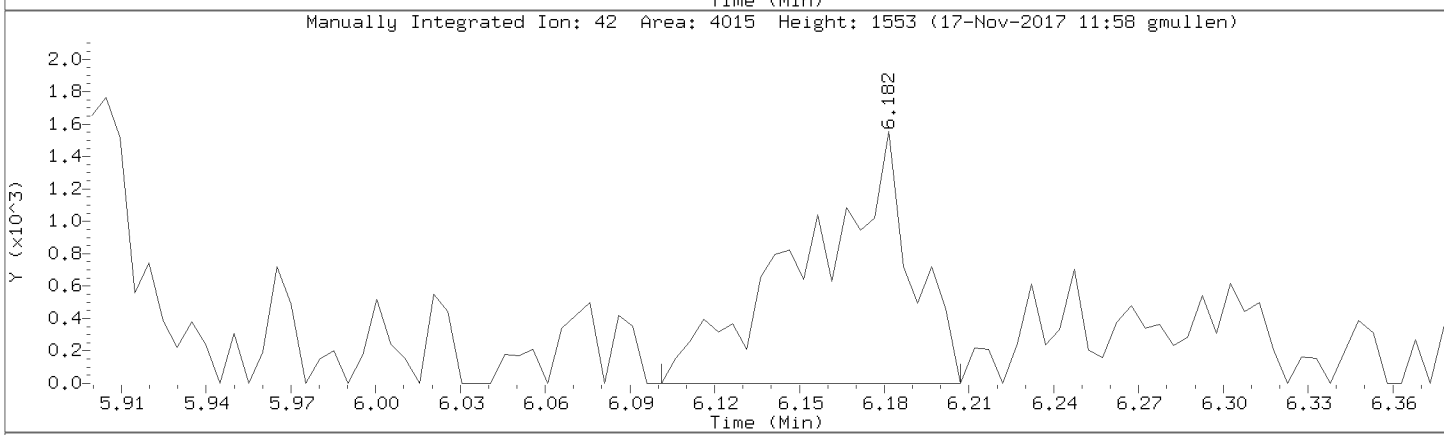
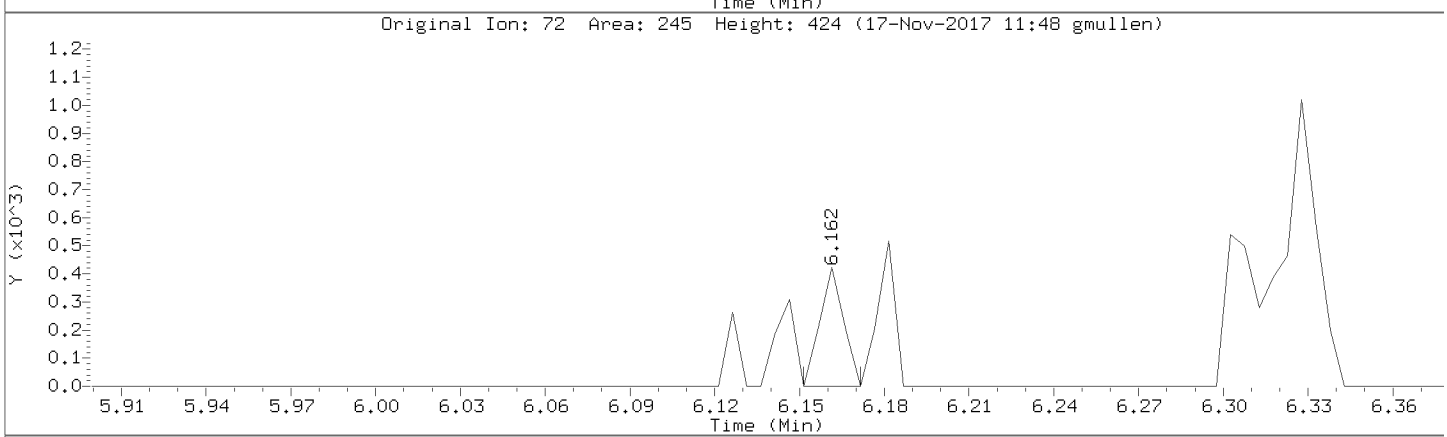
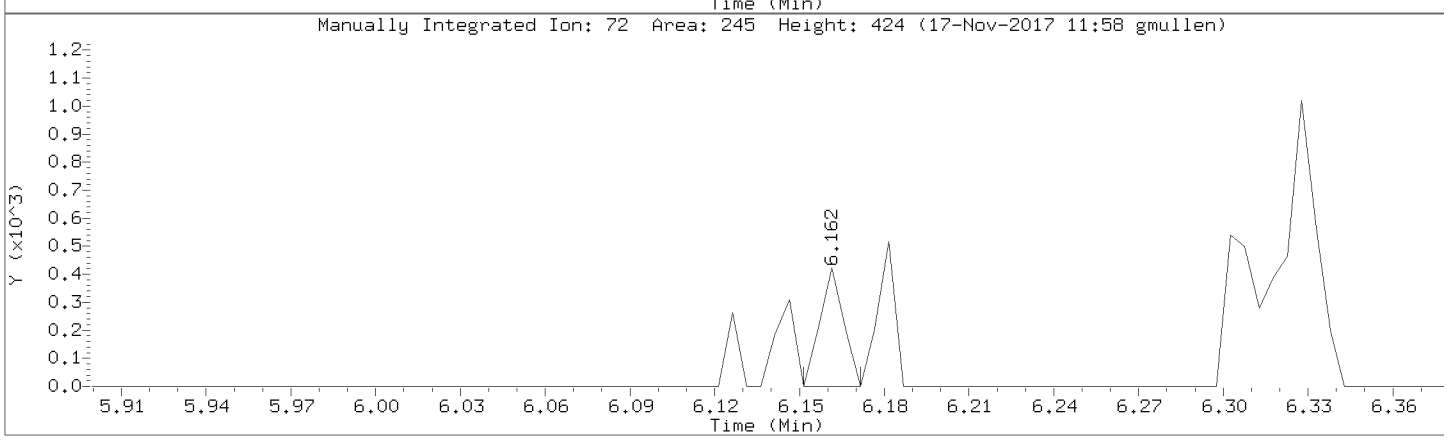
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Tetrahydrofuran Review Code:
CAS Number:









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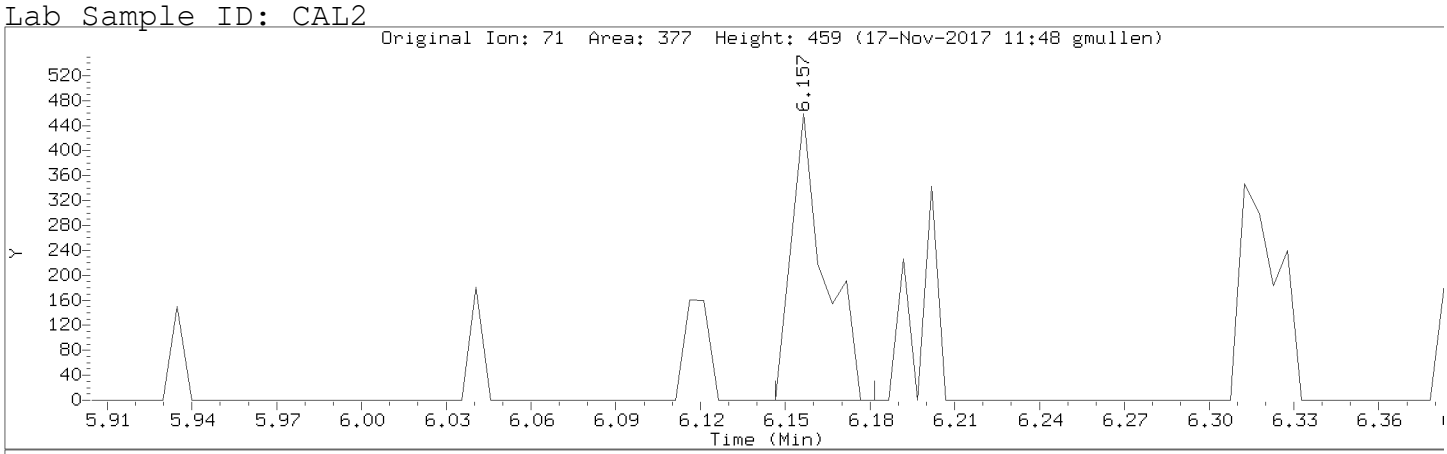
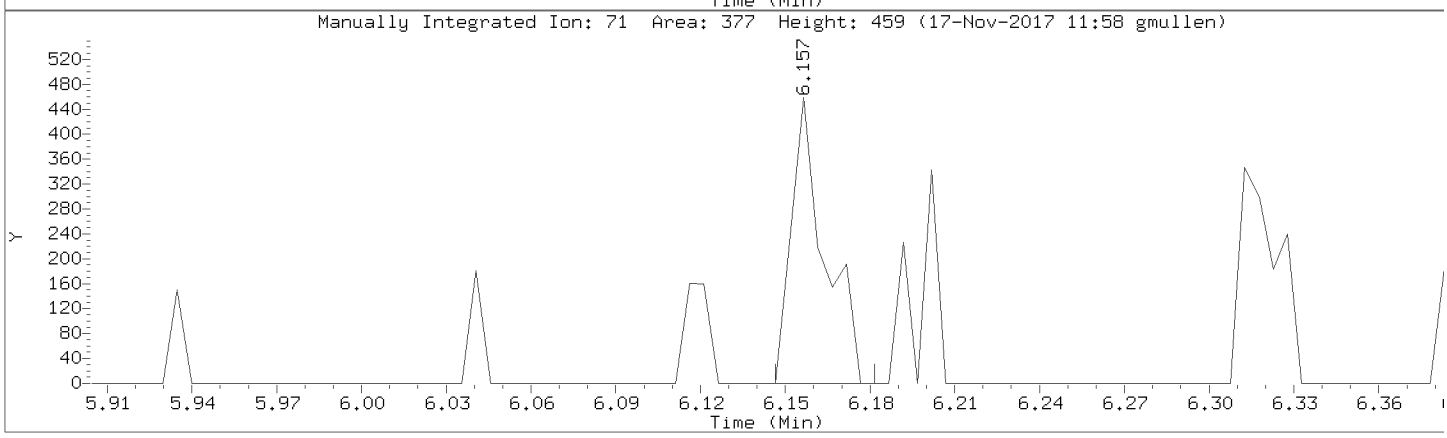
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d06.d
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2





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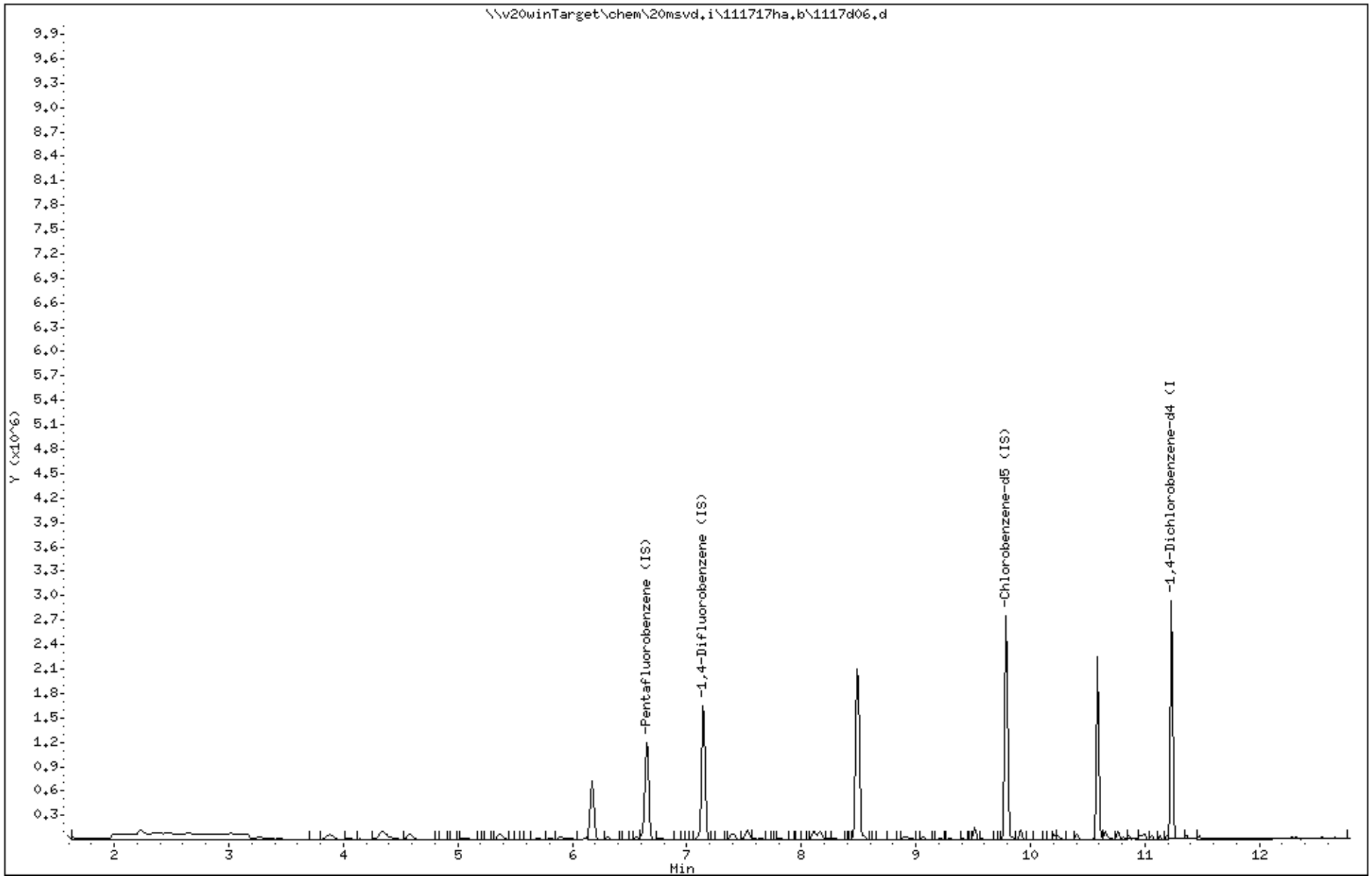
Date : 17-NOV-2017 09:47
Client ID: CAL2
Instrument: 20msvd.i
Sample Info: CAL2,54437:1
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



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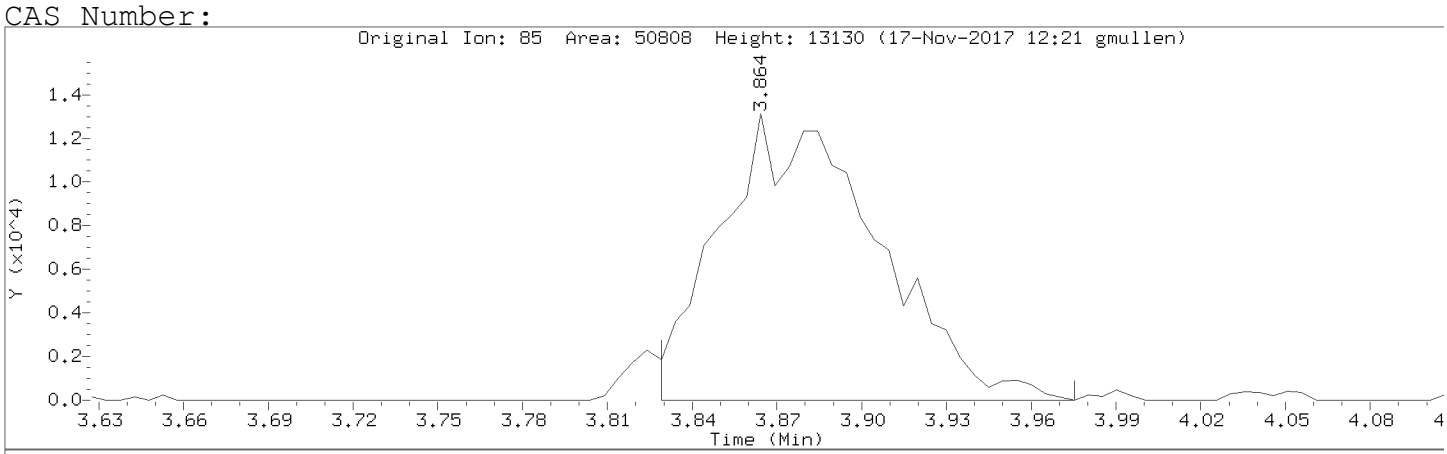
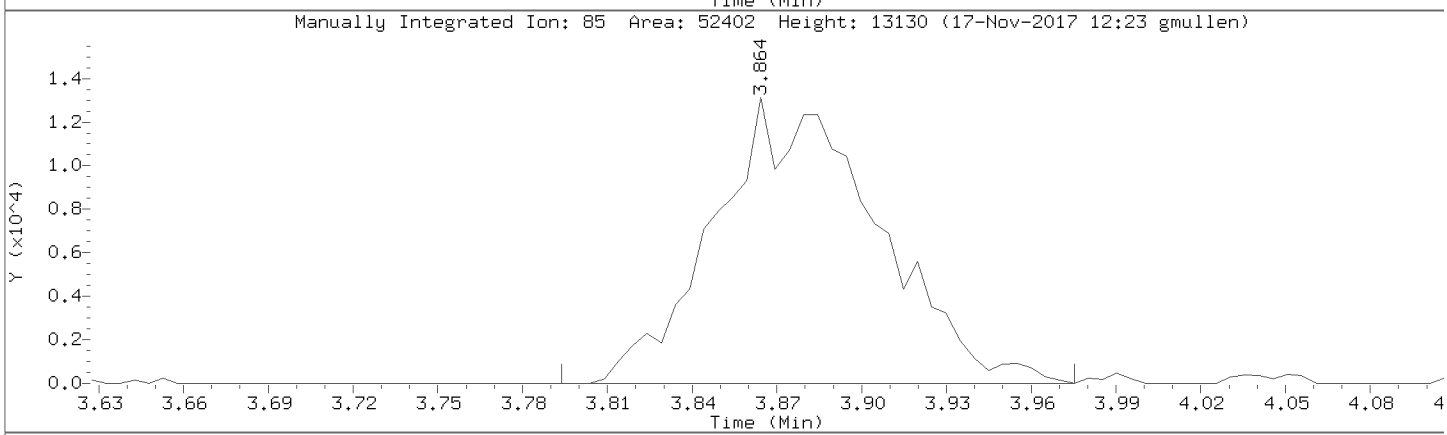
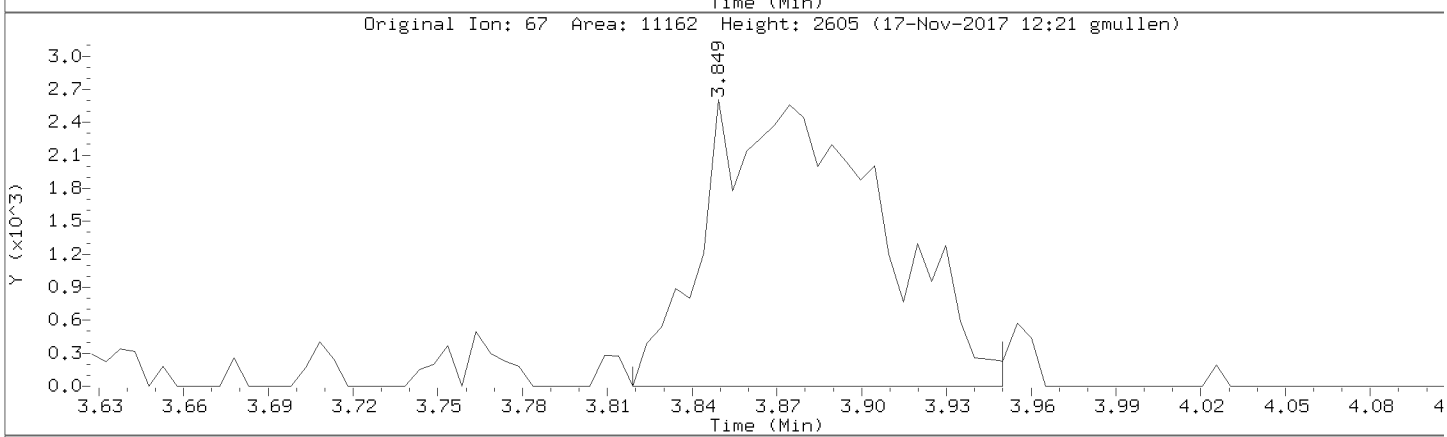
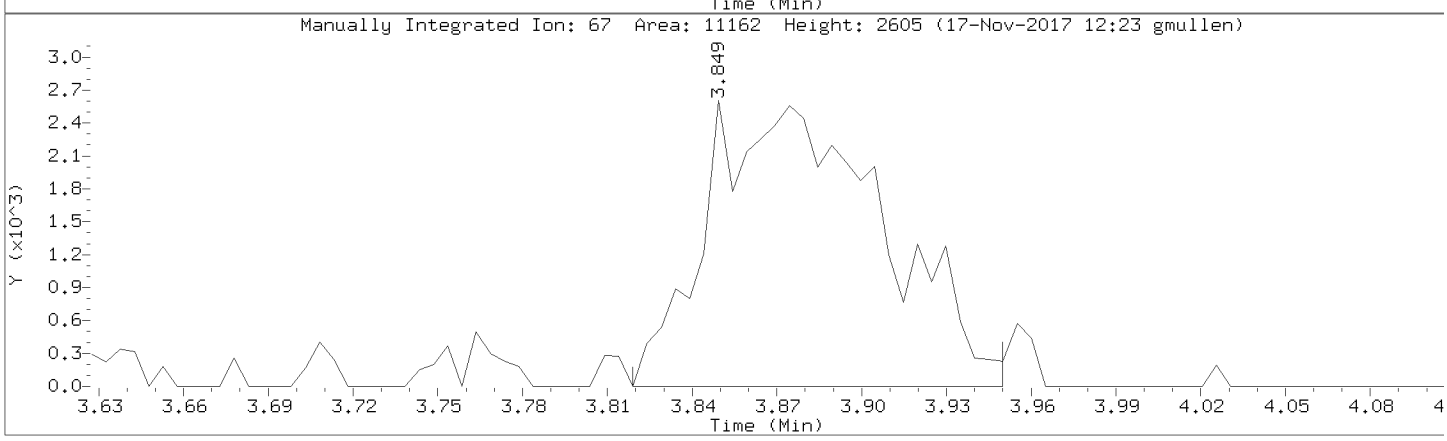
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Haloether 406 Review Code: LT
CAS Number:









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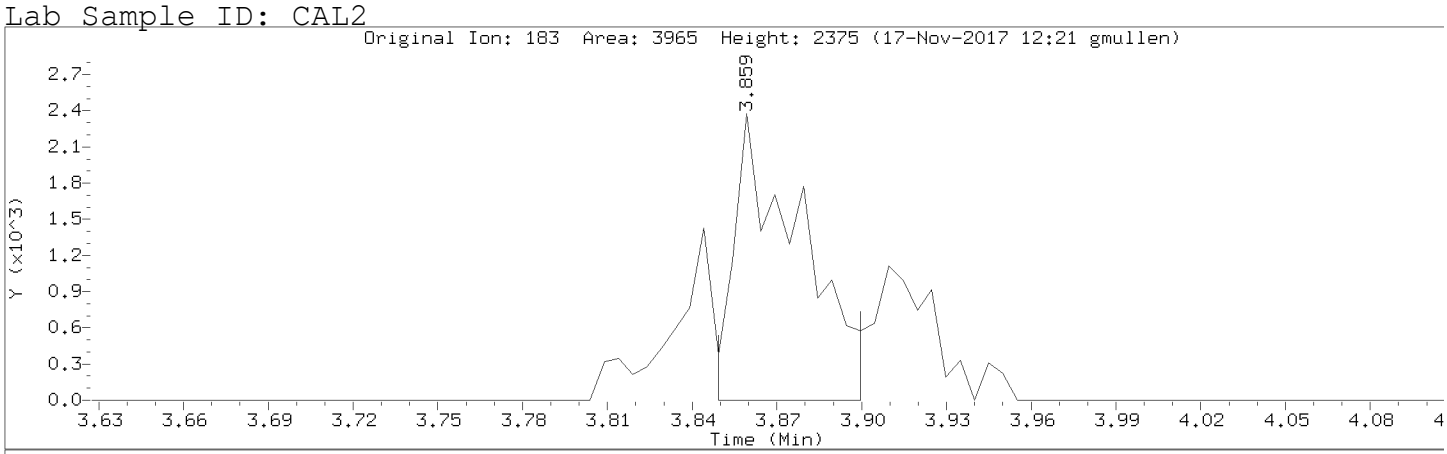
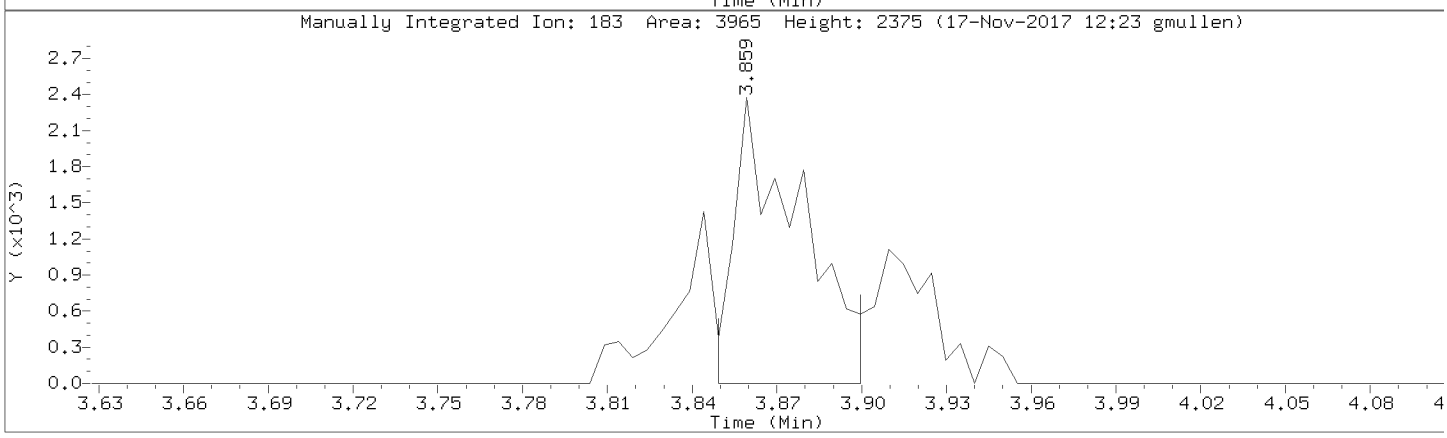
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2





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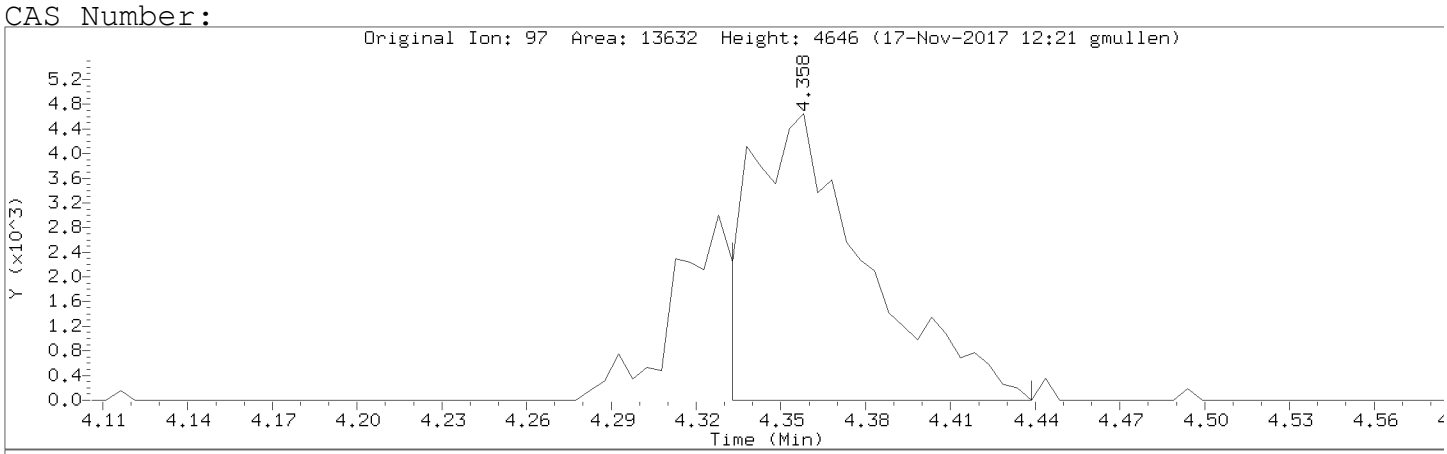
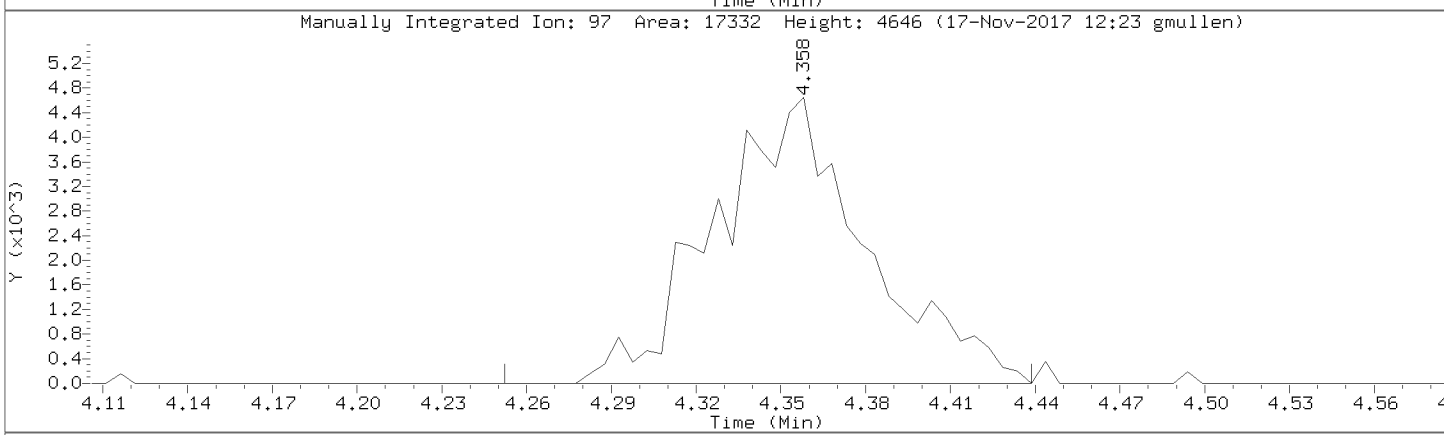
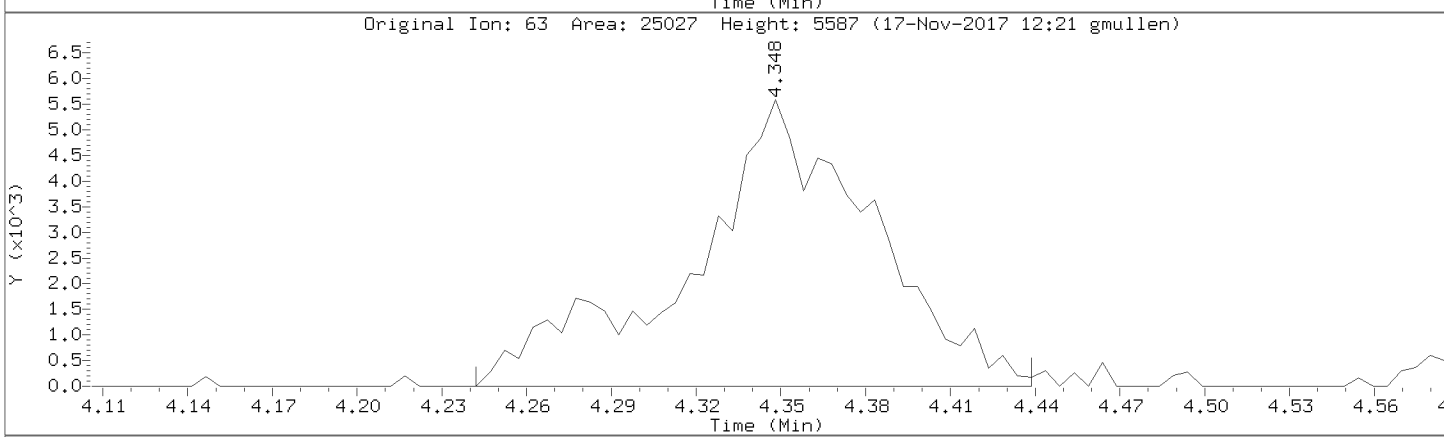
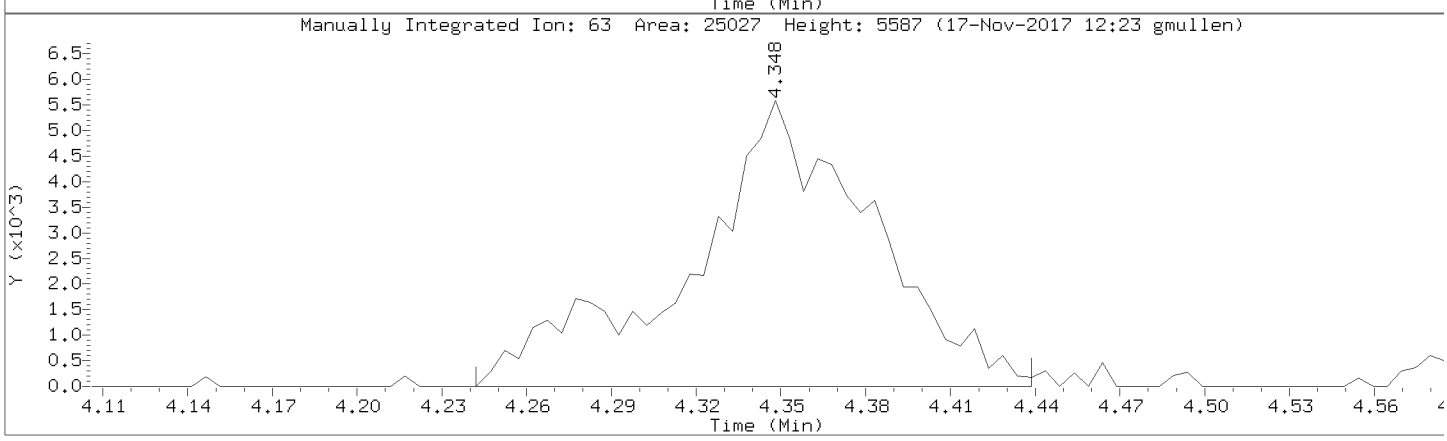
Injection Date: 17-NOV-2017 09:47
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Haloether 508 Review Code: LT
CAS Number:









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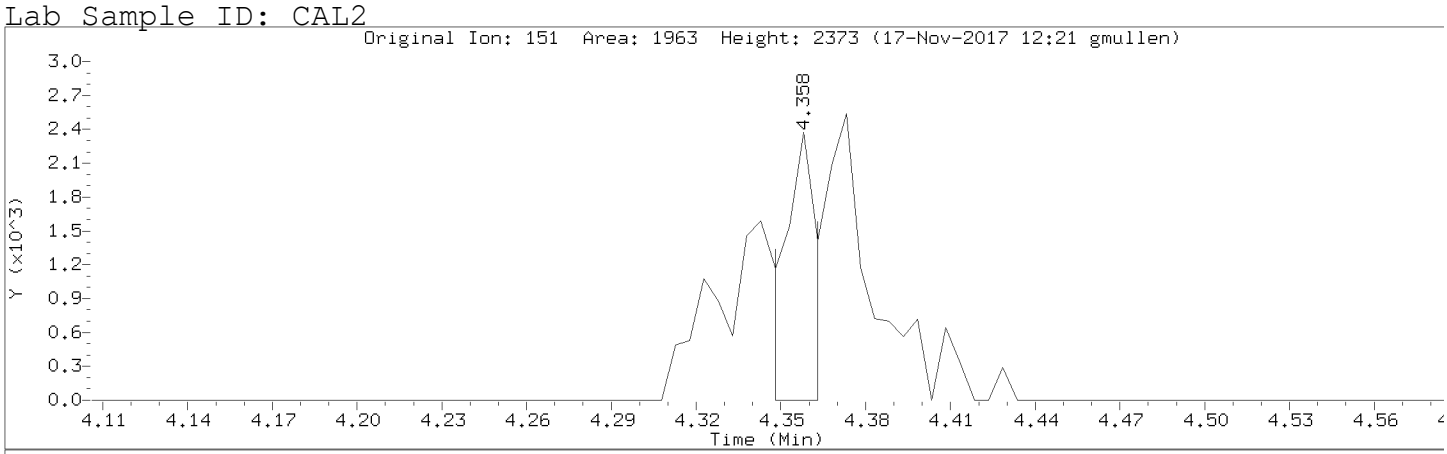
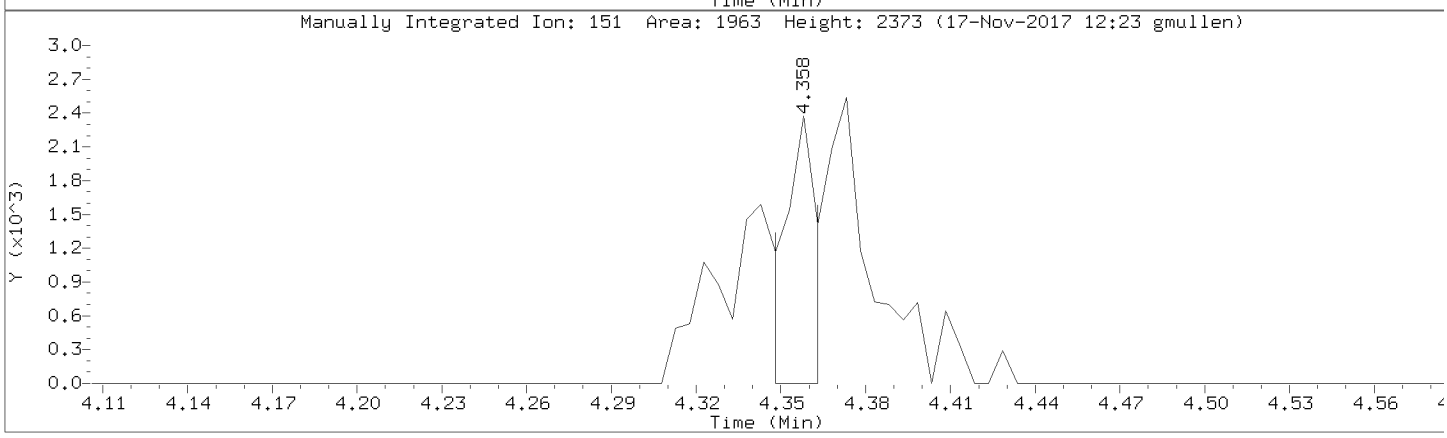
Lab Sample ID: CAL2





Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d07.d
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Inj Date : 17-NOV-2017 10:05
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal3,54438:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:14 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:05 Cal File: 1117d07.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.237	2.237	(0.336)	59950	10.0000	9.46
2 Haloether 406	85	3.889	3.879	(0.585)	107690	10.0000	10.6
3 Isoflurane	117	4.337	4.332	(0.652)	35843	10.0000	11.4
4 Haloether 508	97	4.357	4.357	(0.655)	31248	10.0000	11.8
5 Enflurane	117	4.574	4.584	(0.688)	73578	10.0000	10.7
6 Halomar	81	5.365	5.360	(0.807)	156911	10.0000	10.0
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	391474	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.143	7.143	(1.000)	1132839	50.0000	
7 Haloether 421	67	7.395	7.405	(1.035)	138769	10.0000	10.4
8 Haloether 427	151	7.526	7.526	(1.054)	96399	10.0000	10.4
11 Haloether 428	117	8.111	8.111	(1.135)	105353	10.0000	10.5
12 Methoxyflurane	81	8.161	8.161	(1.142)	205773	10.0000	10.2
13 Haloether 528	211	9.511	9.516	(1.331)	166804	10.0000	9.89
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	548907	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.239	(1.000)	474217	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d07.d
Lab Smp Id: CAL3 Client Smp ID: CAL3
Inj Date : 17-NOV-2017 10:05
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal3,54399:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:05 Cal File: 1117d07.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	37031	5.00000	4.91
2 Chloromethane	50	1.889	1.894	(0.284)	54455	5.00000	5.18
3 Vinyl chloride	62	1.985	1.990	(0.298)	73967	5.00000	5.00
4 Bromomethane	94	2.342	2.338	(0.352)	33335	5.00000	4.72
5 Chloroethane	64	2.488	2.489	(0.374)	36385	5.00000	4.75(H)
6 Trichlorofluoromethane	101	2.650	2.650	(0.399)	65416	5.00000	4.64
7 1,1-Dichloroethene	96	3.249	3.244	(0.489)	33793	5.00000	5.17
8 Carbon disulfide	76	3.269	3.275	(0.492)	102153	5.00000	4.95
9 1,1,2-Trichlorotrifluoroethane	101	3.320	3.315	(0.499)	36281	5.00000	5.02
10 Iodomethane	142	3.425	3.426	(0.515)	63306	5.00000	5.04
11 Acrolein	56	3.713	3.718	(0.558)	7270	5.00000	5.79(M)
12 Allyl chloride	41	3.894	3.894	(0.586)	63190	5.00000	4.95
13 Methylene Chloride	84	4.045	4.051	(0.608)	37117	5.00000	4.85
14 Acetone	43	4.151	4.146	(0.624)	8853	5.00000	4.62
15 trans-1,2-Dichloroethene	96	4.272	4.277	(0.642)	32875	5.00000	4.75
16 Methyl Acetate	74	4.327	4.318	(0.651)	3520	5.00000	4.90(M)
17 n-Hexane	57	4.393	4.388	(0.661)	58678	5.00000	4.57
18 Methyl-tert-butyl ether	73	4.453	4.449	(0.670)	74540	5.00000	5.19
19 Acetonitrile	41	4.771	4.766	(0.717)	30788	50.0000	49.6
20 Chloroprene	53	5.048	5.048	(0.759)	64382	5.00000	4.85
21 1,1-Dichloroethane	63	5.068	5.073	(0.762)	77428	5.00000	5.10
22 Acrylonitrile	53	5.158	5.144	(0.776)	12215	5.00000	5.41

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.395	5.396	(0.811)	155372	5.00000	4.93
	24 cis-1,2-Dichloroethene	96	5.692	5.688	(0.856)	38680	5.00000	5.04
	25 2,2-Dichloropropane	77	5.808	5.804	(0.873)	44597	5.00000	5.08
	26 Cyclohexane	84	5.889	5.889	(0.886)	46342	5.00000	4.84
	27 Bromochloromethane	128	5.894	5.894	(0.886)	16750	5.00000	4.89
	28 Chloroform	83	5.985	5.985	(0.900)	65310	5.00000	5.01
	29 Carbon tetrachloride	117	6.116	6.111	(0.856)	48549	5.00000	5.14
	30 Tetrahydrofuran	42	6.156	6.151	(0.926)	12036	5.00000	5.33
	31 1,1,1-Trichloroethane	97	6.191	6.187	(0.931)	57292	5.00000	5.15
$	32 Dibromofluoromethane (S)	113	6.171	6.166	(0.928)	398649	50.0000	49.0
	33 1,1-Dichloropropene	75	6.317	6.312	(0.884)	49531	5.00000	5.00
	34 2-Butanone (MEK)	43	6.317	6.312	(0.950)	14960	5.00000	5.76
	35 Benzene	78	6.559	6.559	(0.918)	134801	5.00000	5.10
	36 Propionitrile	54	6.594	6.600	(0.992)	38232	50.0000	48.8
	37 Methacrylonitrile	41	6.619	6.620	(0.995)	180133	50.0000	48.6
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	391474	50.0000	
	39 1,2-Dichloroethane	62	6.755	6.756	(0.946)	48038	5.00000	5.03
	40 Isobutanol	43	6.786	6.786	(1.020)	24210	105.000	110
	41 Methylcyclohexane	83	7.093	7.098	(0.993)	51448	5.00000	4.94
	42 Trichloroethene	130	7.108	7.108	(0.995)	37209	5.00000	5.20
*	43 1,4-Difluorobenzene (IS)	114	7.143	7.144	(1.000)	1130847	50.0000	
	44 Dibromomethane	93	7.496	7.491	(1.049)	20487	5.00000	5.00
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	42176	5.00000	5.20
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	45704	5.00000	5.09
	47 Methyl methacrylate	41	7.803	7.809	(1.092)	57490	10.0000	10.1
	48 1,4-Dioxane (p-Dioxane)	88	7.854	7.844	(1.099)	3912	100.000	119
	49 2-Chloroethyl vinyl ether	63	8.226	8.227	(1.152)	42781	10.0000	10.2
	50 cis-1,3-Dichloropropene	75	8.287	8.287	(1.160)	53377	5.00000	5.04
$	51 Toluene-d8 (S)	98	8.488	8.489	(1.188)	1330447	50.0000	51.3
	52 Toluene	91	8.539	8.539	(1.195)	144154	5.00000	5.19
	53 Tetrachloroethene	164	8.901	8.902	(0.909)	34129	5.00000	5.23
	54 4-Methyl-2-Pentanone	43	8.906	8.902	(0.910)	27628	5.00000	4.99
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	44433	5.00000	5.10
	56 Ethyl methacrylate	69	9.068	9.063	(1.269)	29003	5.00000	5.13
	57 1,1,2-Trichloroethane	97	9.073	9.068	(1.270)	24584	5.00000	5.19
	58 Dibromochloromethane	129	9.219	9.214	(0.942)	30265	5.00000	4.81
	59 1,3-Dichloropropane	76	9.299	9.300	(0.950)	41643	5.00000	5.05
	60 1,2-Dibromoethane (EDB)	107	9.410	9.411	(1.317)	25364	5.00000	4.96
	61 2-Hexanone	43	9.576	9.577	(0.978)	20736	5.00000	5.18
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	548907	50.0000	
	63 Chlorobenzene	112	9.798	9.799	(1.001)	93995	5.00000	5.18
	64 Ethylbenzene	91	9.813	9.814	(1.003)	162623	5.00000	5.24
	65 1,1,1,2-Tetrachloroethane	131	9.843	9.844	(1.006)	32184	5.00000	4.74
	66 m&p-Xylene	106	9.914	9.914	(1.013)	112493	10.0000	9.48
	67 o-Xylene	106	10.206	10.207	(1.043)	53792	5.00000	4.96
	68 Styrene	104	10.241	10.242	(1.046)	88486	5.00000	4.98
	69 Bromoform	173	10.267	10.267	(1.049)	19901	5.00000	4.68
	70 Isopropylbenzene (Cumene)	105	10.403	10.408	(0.926)	133884	5.00000	4.91
$	71 4-Bromofluorobenzene (S)	176	10.584	10.589	(0.942)	475697	50.0000	51.2
	72 trans-1,4-Dichloro-2-butene	88	10.624	10.625	(0.946)	20008	10.0000	9.85(H)
	73 Bromobenzene	156	10.655	10.655	(0.948)	37928	5.00000	5.08
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	165526	5.00000	5.06
	75 1,1,2,2-Tetrachloroethane	83	10.705	10.705	(0.953)	30781	5.00000	5.37
	76 2-Chlorotoluene	91	10.760	10.761	(0.958)	101023	5.00000	4.93

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.770	10.771	(0.959)	101398	5.00000	4.86
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	7332	5.00000	5.04
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	98185	5.00000	5.27
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	62317	5.00000	5.27
81 Pentachloroethane	167	10.982	10.982	(0.978)	21301	5.00000	4.69
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	98733	5.00000	4.90
83 sec-Butylbenzene	105	11.058	11.063	(0.984)	128222	5.00000	5.13
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	96456	5.00000	4.79
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	58075	5.00000	5.07
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	474217	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	58278	5.00000	5.00
88 n-Butylbenzene	91	11.365	11.370	(1.012)	93796	5.00000	4.93
89 1,2-Dichlorobenzene	146	11.476	11.481	(1.022)	51094	5.00000	5.08
90 1,2-Dibromo-3-chloropropane	157	11.922	11.927	(1.061)	7373	5.00000	5.16
91 Hexachloro-1,3-butadiene	225	12.287	12.287	(1.094)	15443	5.00000	4.95
92 1,2,4-Trichlorobenzene	180	12.322	12.327	(1.097)	24080	5.00000	4.91
93 Naphthalene	128	12.544	12.549	(1.117)	44098	5.00000	4.57
94 1,2,3-Trichlorobenzene	180	12.670	12.675	(1.128)	18955	5.00000	5.19

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\111717ha.b\1117d07.d
Date : 17-NOV-2017 10:05
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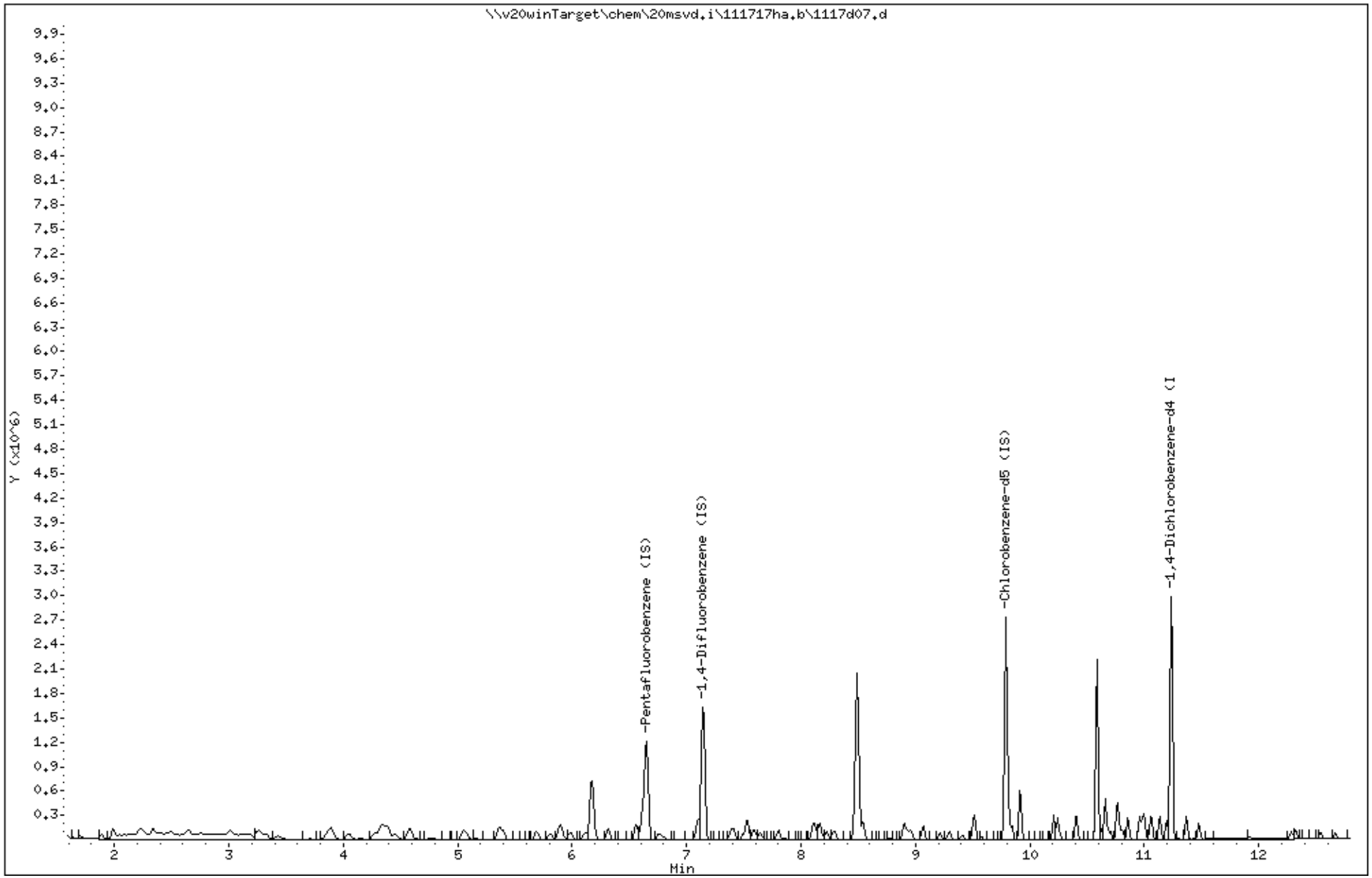
Sample Info: CAL3,54438:1
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717ha.b/1117d07.d
Injection Date: 17-NOV-2017 10:05
Instrument: 20msvd.i
Lab Sample ID: CAL3
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d07.d
Date : 17-NOV-2017 10:05
Client ID: CAL3
Instrument: 20msvd.i
Sample Info: CAL3,54399:1
Purge Volume: 5.0
Operator: GEM
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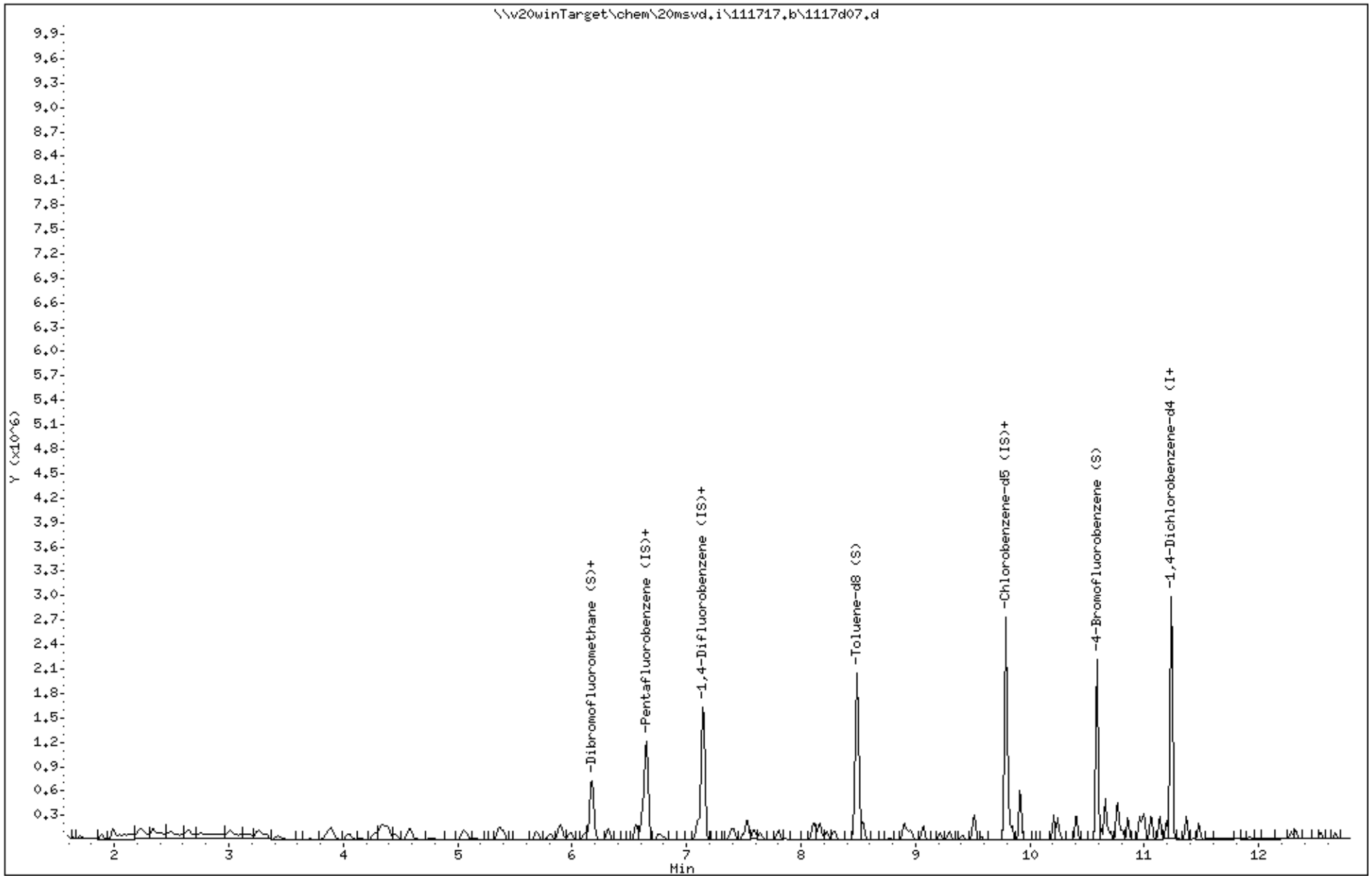
Column diameter: 0.25



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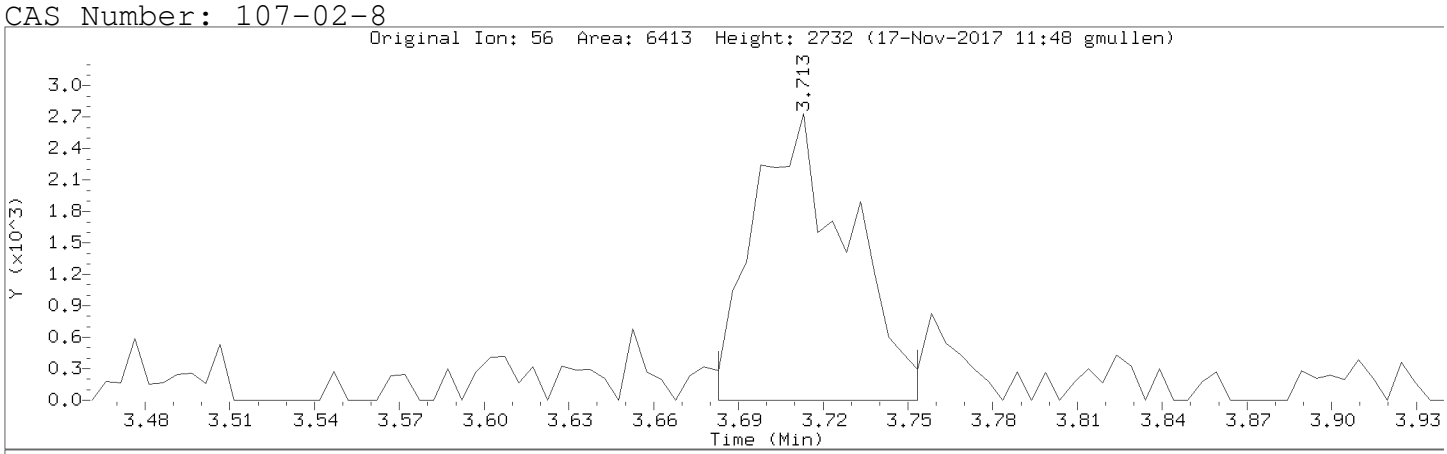
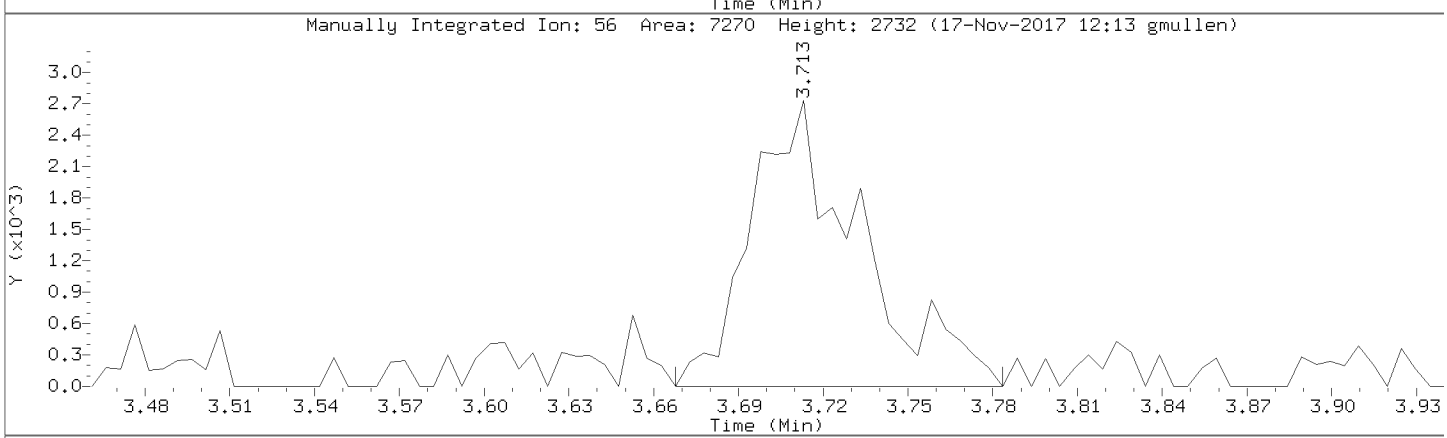
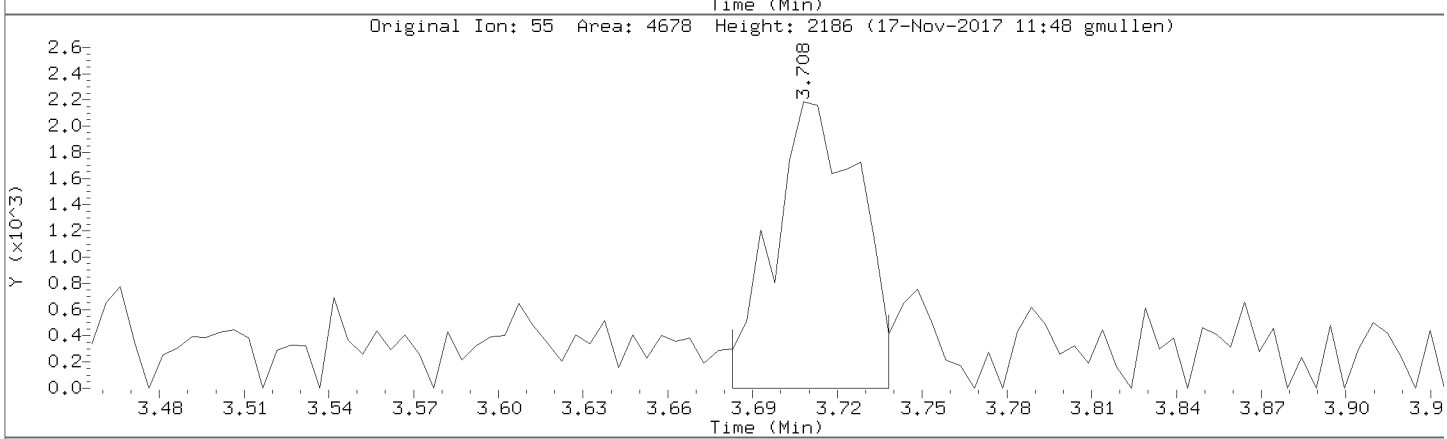
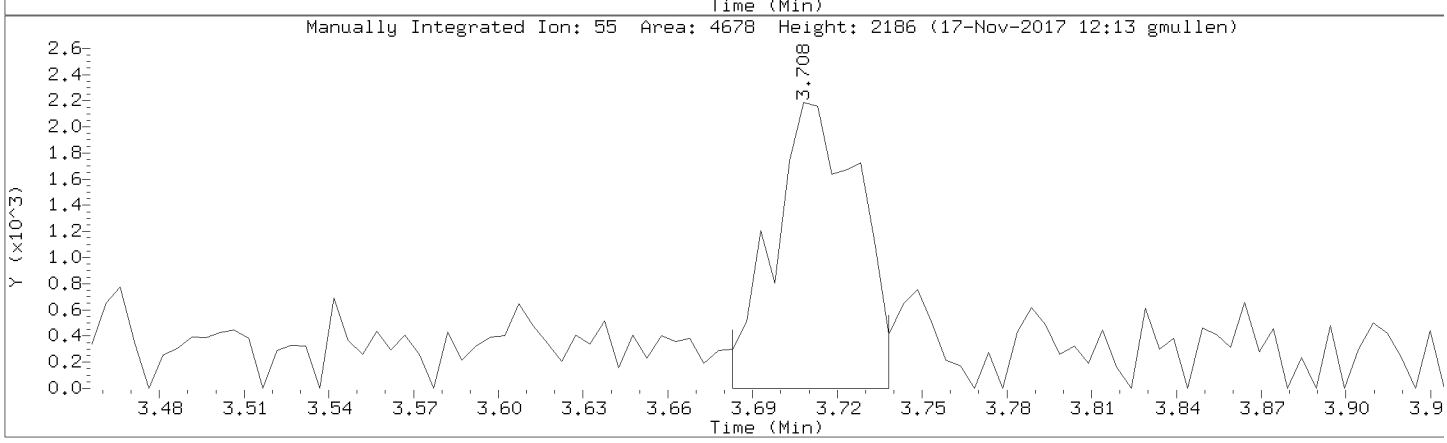
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: Acrolein Review Code: LT
CAS Number: 107-02-8









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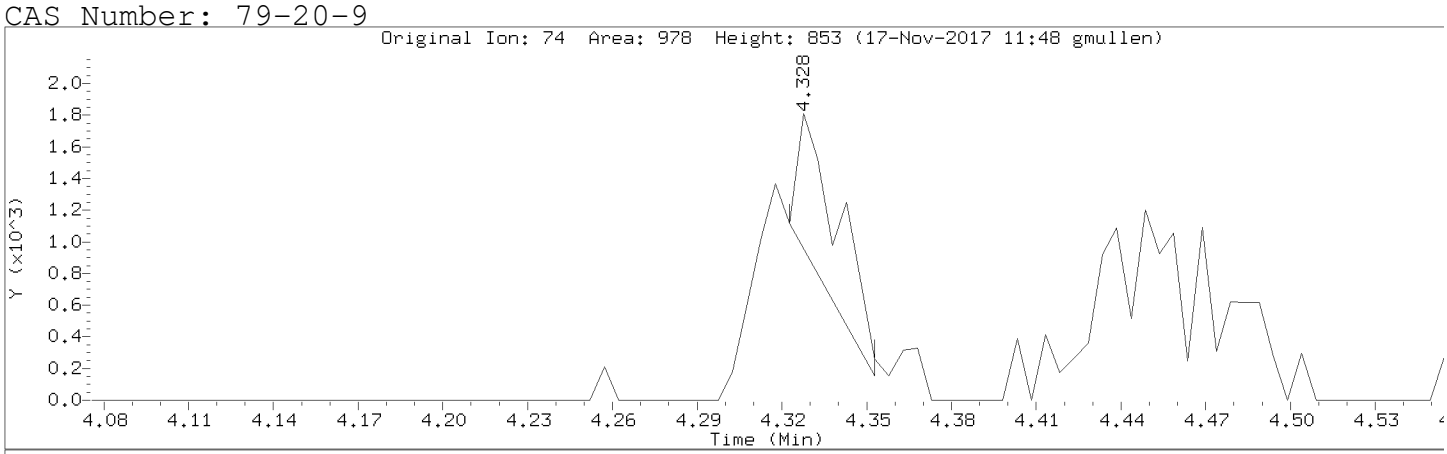
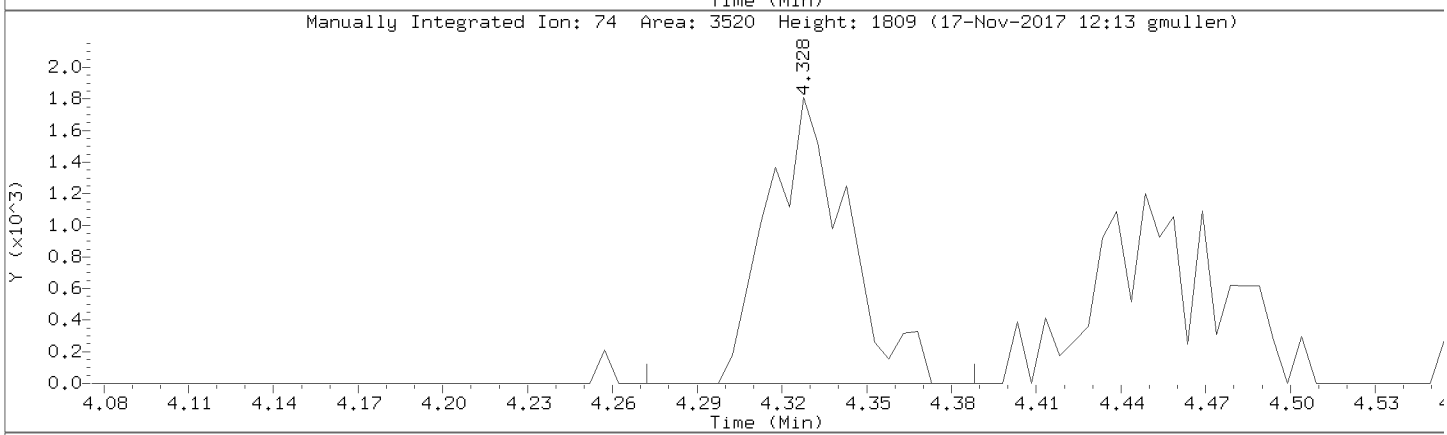
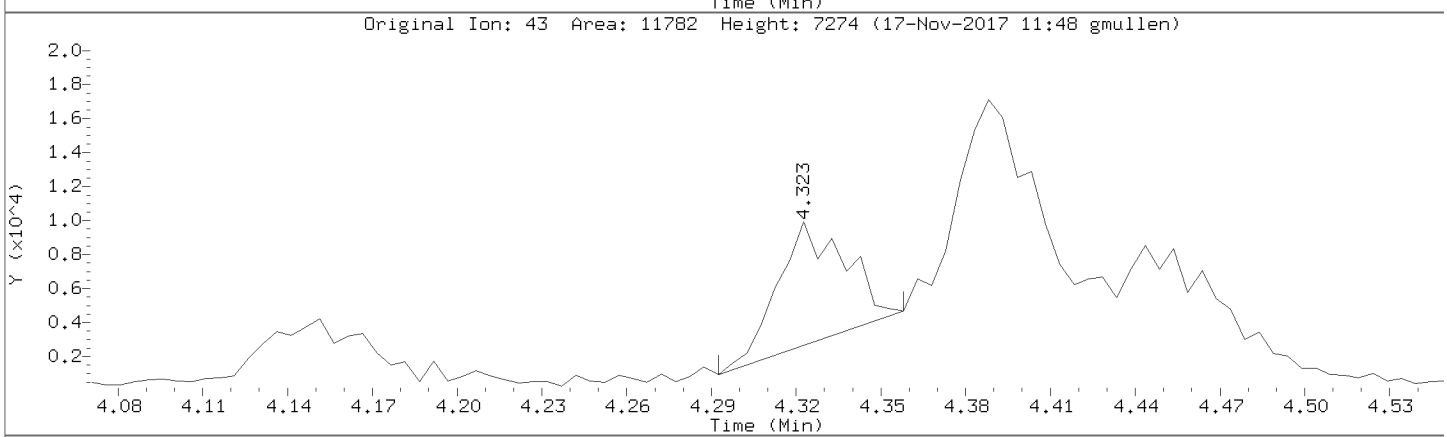
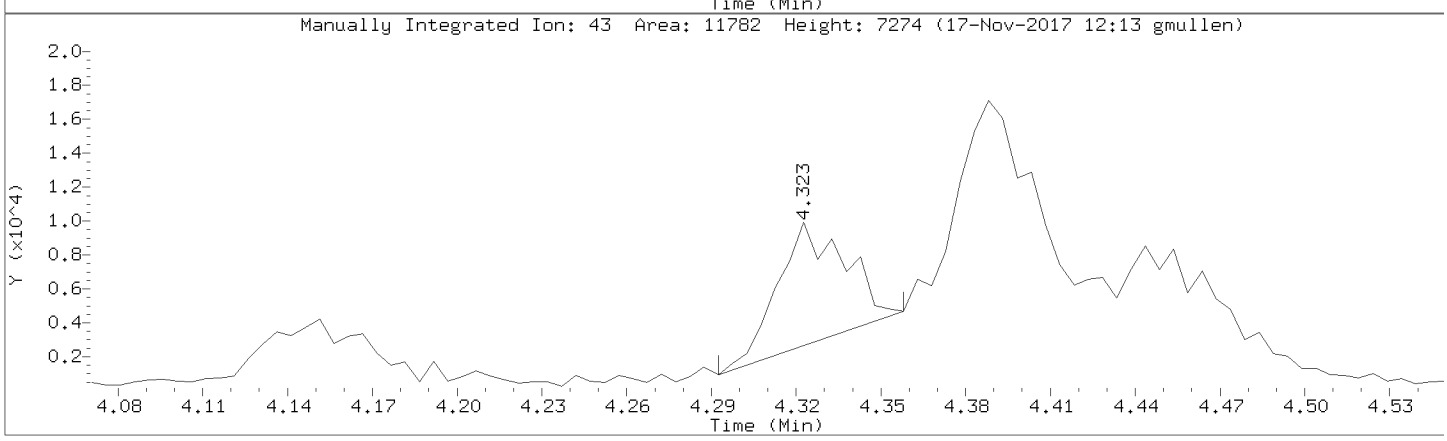
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d07.d
Injection Date: 17-NOV-2017 10:05
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: Methyl Acetate Review Code: LT
CAS Number: 79-20-9









Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d08.d
Lab Smp Id: CAL4 Client Smp ID: CAL4
Inj Date : 17-NOV-2017 10:23
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal4,54400:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:23 Cal File: 1117d08.d
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	161786	20.0000	21.4
2 Chloromethane	50	1.894	1.894	(0.285)	211691	20.0000	20.1
3 Vinyl chloride	62	1.990	1.990	(0.299)	302915	20.0000	20.4
4 Bromomethane	94	2.342	2.338	(0.352)	136155	20.0000	19.2
5 Chloroethane	64	2.488	2.489	(0.374)	149516	20.0000	27.8(H)
6 Trichlorofluoromethane	101	2.645	2.650	(0.398)	283765	20.0000	20.0
7 1,1-Dichloroethene	96	3.249	3.244	(0.489)	130524	20.0000	19.5
8 Carbon disulfide	76	3.274	3.275	(0.492)	414979	20.0000	20.1
9 1,1,2-Trichlorotrifluoroethane	101	3.325	3.315	(0.500)	146249	20.0000	20.2
10 Iodomethane	142	3.430	3.426	(0.516)	251997	20.0000	20.0
11 Acrolein	56	3.713	3.718	(0.558)	22655	20.0000	15.9
12 Allyl chloride	41	3.899	3.894	(0.586)	254959	20.0000	19.9
13 Methylene Chloride	84	4.050	4.051	(0.609)	137622	20.0000	19.8
14 Acetone	43	4.141	4.146	(0.623)	33472	20.0000	21.2
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.643)	138359	20.0000	19.9
16 Methyl Acetate	74	4.322	4.318	(0.650)	15510	20.0000	21.5(M)
17 n-Hexane	57	4.393	4.388	(0.661)	276460	20.0000	20.4
18 Methyl-tert-butyl ether	73	4.448	4.449	(0.669)	287941	20.0000	20.0
19 Acetonitrile	41	4.765	4.766	(0.717)	121094	200.000	194
20 Chloroprene	53	5.048	5.048	(0.759)	271012	20.0000	20.3
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	322442	20.0000	21.2
22 Acrylonitrile	53	5.148	5.144	(0.774)	41928	20.0000	18.5

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.400	5.396	(0.812)	607990	20.0000	19.2
	24 cis-1,2-Dichloroethene	96	5.692	5.688	(0.856)	151175	20.0000	19.6
	25 2,2-Dichloropropane	77	5.813	5.804	(0.874)	181337	20.0000	20.6
	26 Cyclohexane	84	5.899	5.889	(0.887)	193774	20.0000	20.2
	27 Bromochloromethane	128	5.899	5.894	(0.887)	68029	20.0000	19.8
	28 Chloroform	83	5.985	5.985	(0.900)	263622	20.0000	20.2
	29 Carbon tetrachloride	117	6.116	6.111	(0.856)	201594	20.0000	21.0
	30 Tetrahydrofuran	42	6.156	6.151	(0.926)	41182	20.0000	19.0
	31 1,1,1-Trichloroethane	97	6.191	6.187	(0.931)	226986	20.0000	20.3
$	32 Dibromofluoromethane (S)	113	6.171	6.166	(0.928)	399039	50.0000	48.9
	33 1,1-Dichloropropene	75	6.312	6.312	(0.883)	209245	20.0000	20.8
	34 2-Butanone (MEK)	43	6.322	6.312	(0.951)	49413	20.0000	19.4
	35 Benzene	78	6.559	6.559	(0.918)	556942	20.0000	20.8
	36 Propionitrile	54	6.604	6.600	(0.993)	155978	200.000	198
	37 Methacrylonitrile	41	6.619	6.620	(0.995)	724832	200.000	195
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	392753	50.0000	
	39 1,2-Dichloroethane	62	6.760	6.756	(0.946)	198693	20.0000	20.5
	40 Isobutanol	43	6.791	6.786	(1.021)	88865	420.000	403
	41 Methylcyclohexane	83	7.103	7.098	(0.994)	223344	20.0000	21.1
	42 Trichloroethene	130	7.108	7.108	(0.994)	156056	20.0000	21.5
*	43 1,4-Difluorobenzene (IS)	114	7.148	7.144	(1.000)	1147647	50.0000	
	44 Dibromomethane	93	7.496	7.491	(1.049)	80603	20.0000	19.4
	45 1,2-Dichloropropane	63	7.592	7.592	(1.062)	169418	20.0000	20.6
	46 Bromodichloromethane	83	7.647	7.647	(1.070)	187705	20.0000	20.6
	47 Methyl methacrylate	41	7.803	7.809	(1.092)	228779	40.0000	39.8
	48 1,4-Dioxane (p-Dioxane)	88	7.854	7.844	(1.099)	13097	400.000	392
	49 2-Chloroethyl vinyl ether	63	8.226	8.227	(1.151)	170803	40.0000	40.0
	50 cis-1,3-Dichloropropene	75	8.292	8.287	(1.160)	225359	20.0000	21.0
$	51 Toluene-d8 (S)	98	8.488	8.489	(1.187)	1308573	50.0000	49.7
	52 Toluene	91	8.539	8.539	(1.194)	578797	20.0000	20.5
	53 Tetrachloroethene	164	8.901	8.902	(0.909)	137671	20.0000	21.3
	54 4-Methyl-2-Pentanone	43	8.901	8.902	(0.909)	106871	20.0000	19.5
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.249)	187044	20.0000	21.2
	56 Ethyl methacrylate	69	9.063	9.063	(1.268)	112898	20.0000	19.7
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.268)	98780	20.0000	20.5
	58 Dibromochloromethane	129	9.219	9.214	(0.942)	126345	20.0000	20.3
	59 1,3-Dichloropropane	76	9.294	9.300	(0.950)	169679	20.0000	20.8
	60 1,2-Dibromoethane (EDB)	107	9.410	9.411	(1.316)	103891	20.0000	20.0
	61 2-Hexanone	43	9.576	9.577	(0.978)	73669	20.0000	18.6
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	543653	50.0000	
	63 Chlorobenzene	112	9.798	9.799	(1.001)	368070	20.0000	20.5
	64 Ethylbenzene	91	9.813	9.814	(1.003)	640832	20.0000	20.8
	65 1,1,1,2-Tetrachloroethane	131	9.843	9.844	(1.006)	136730	20.0000	20.3
	66 m&p-Xylene	106	9.914	9.914	(1.013)	478718	40.0000	40.8
	67 o-Xylene	106	10.206	10.207	(1.043)	223394	20.0000	20.8
	68 Styrene	104	10.241	10.242	(1.046)	359078	20.0000	20.4
	69 Bromoform	173	10.262	10.267	(1.048)	85693	20.0000	20.4
	70 Isopropylbenzene (Cumene)	105	10.408	10.408	(0.926)	563045	20.0000	19.8
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	478737	50.0000	49.5
	72 trans-1,4-Dichloro-2-butene	88	10.624	10.625	(0.946)	79682	40.0000	(H)
	73 Bromobenzene	156	10.655	10.655	(0.948)	148574	20.0000	19.1
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	683254	20.0000	20.0
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.705	(0.952)	121213	20.0000	20.3
	76 2-Chlorotoluene	91	10.760	10.761	(0.958)	428012	20.0000	20.0

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.770	10.771	(0.959)	426855	20.0000	19.6
78 1,2,3-Trichloropropane	110	10.786	10.791	(0.960)	28803	20.0000	19.0
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	378211	20.0000	19.5
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	251246	20.0000	20.4
81 Pentachloroethane	167	10.982	10.982	(0.978)	92752	20.0000	19.6
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	414899	20.0000	19.8
83 sec-Butylbenzene	105	11.058	11.063	(0.984)	537779	20.0000	20.6
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	427717	20.0000	20.4
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	234250	20.0000	19.6
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	494060	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.244	(1.000)	240415	20.0000	19.8
88 n-Butylbenzene	91	11.365	11.370	(1.012)	386413	20.0000	19.5
89 1,2-Dichlorobenzene	146	11.476	11.481	(1.022)	199759	20.0000	19.1
90 1,2-Dibromo-3-chloropropane	157	11.922	11.927	(1.061)	30384	20.0000	20.4
91 Hexachloro-1,3-butadiene	225	12.282	12.287	(1.093)	63839	20.0000	19.6
92 1,2,4-Trichlorobenzene	180	12.317	12.327	(1.096)	100156	20.0000	19.6
93 Naphthalene	128	12.539	12.549	(1.116)	193872	20.0000	19.3
94 1,2,3-Trichlorobenzene	180	12.665	12.675	(1.127)	72653	20.0000	19.1

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

SW846 8260

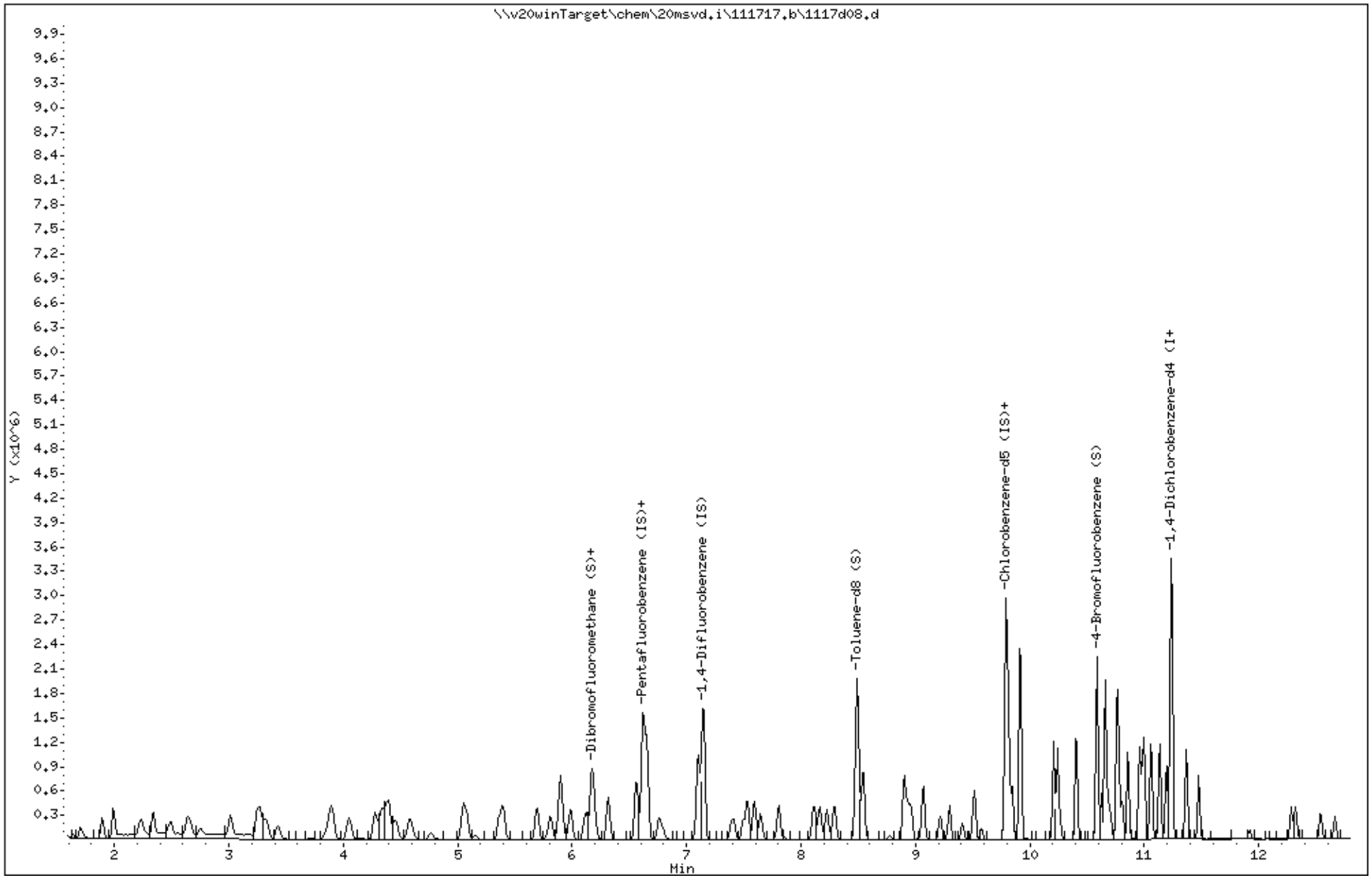
Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d08.d
Lab Smp Id: CAL4 Client Smp ID: CAL4
Inj Date : 17-NOV-2017 10:23
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal4,54439:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:14 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:23 Cal File: 1117d08.d
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

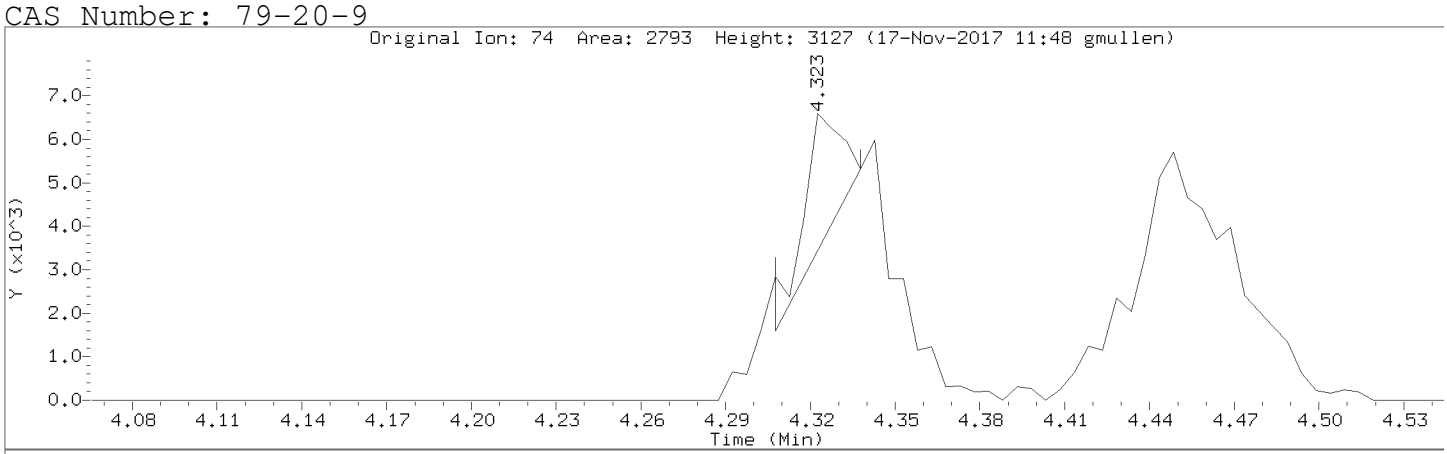
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.237	2.237	(0.336)	124867	20.0000	19.7
2 Haloether 406	85	3.884	3.879	(0.584)	208691	20.0000	20.4
3 Isoflurane	117	4.337	4.332	(0.652)	71983	20.0000	22.2
4 Haloether 508	97	4.357	4.357	(0.655)	55837	20.0000	20.8
5 Enflurane	117	4.579	4.584	(0.689)	143501	20.0000	20.7
6 Halomar	81	5.365	5.360	(0.807)	311756	20.0000	19.9
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	392753	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.148	7.143	(1.000)	1147818	50.0000	
7 Haloether 421	67	7.405	7.405	(1.036)	281075	20.0000	20.6
8 Haloether 427	151	7.526	7.526	(1.053)	197128	20.0000	20.7
11 Haloether 428	117	8.116	8.111	(1.135)	205256	20.0000	20.2
12 Methoxyflurane	81	8.166	8.161	(1.142)	416769	20.0000	20.4
13 Haloether 528	211	9.511	9.516	(1.331)	346959	20.0000	20.2
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	543653	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.239	(1.000)	494060	50.0000	

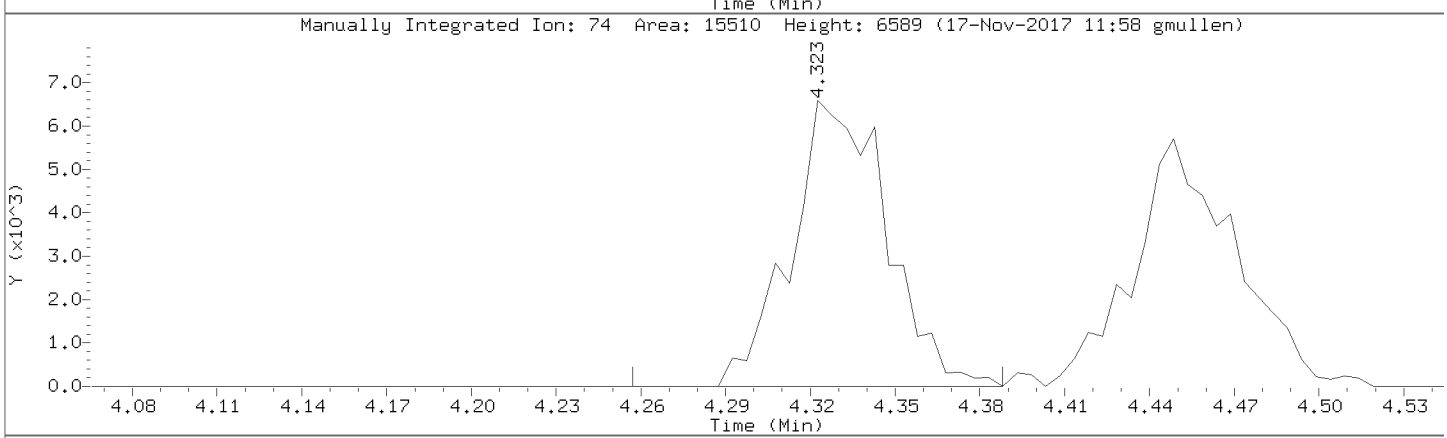
Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d08.d
Date : 17-NOV-2017 10:23
Client ID: CAL4
Instrument: 20msvd.i
Sample Info: CAL4,54400:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25

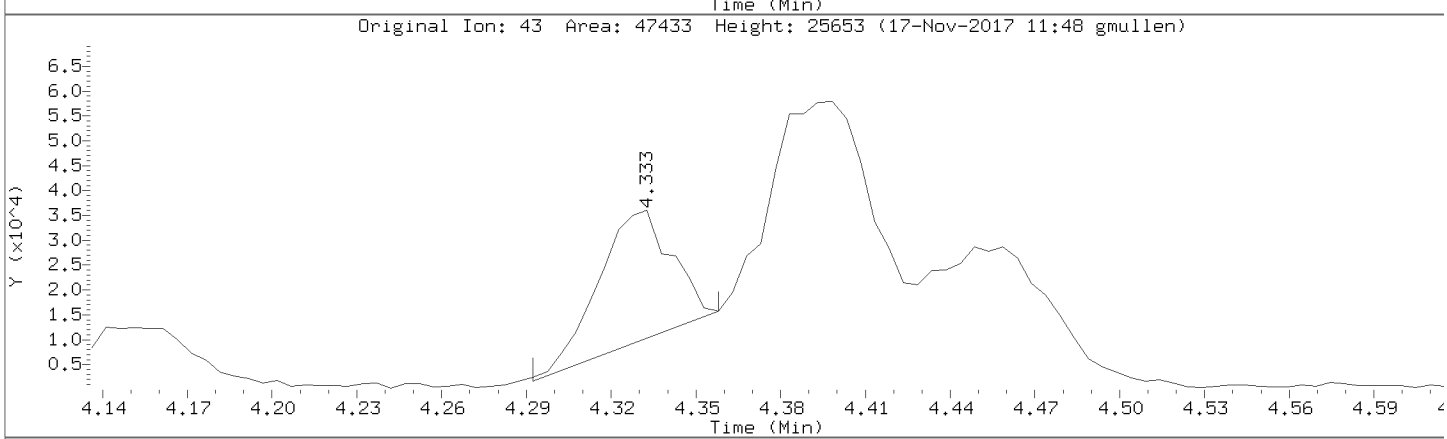


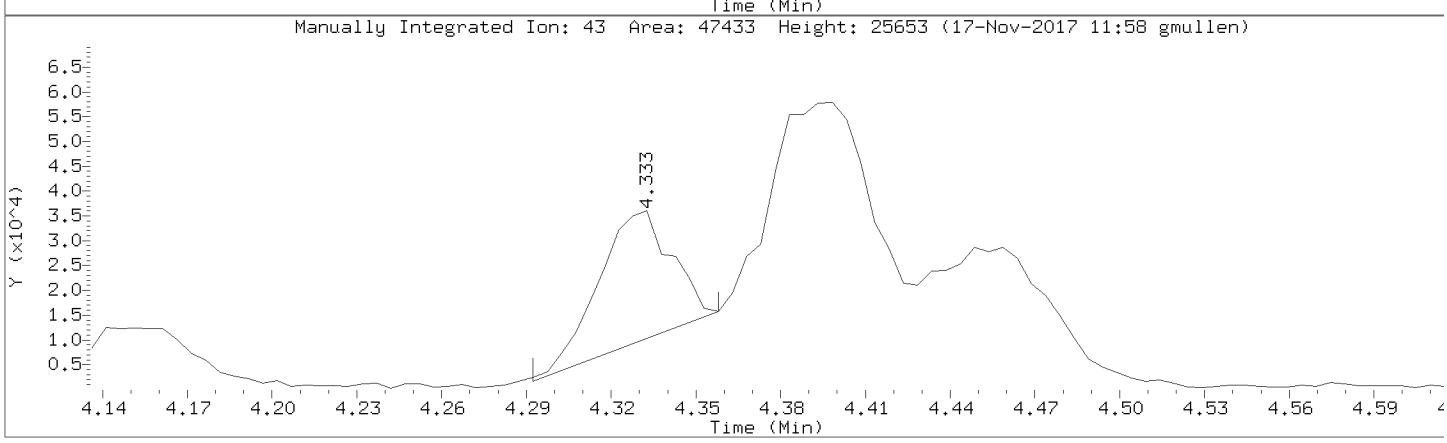
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d08.d
Injection Date: 17-NOV-2017 10:23
Instrument: 20msvd.i
Lab Sample ID: CAL4

Compound: Methyl Acetate Review Code:
CAS Number: 79-20-9

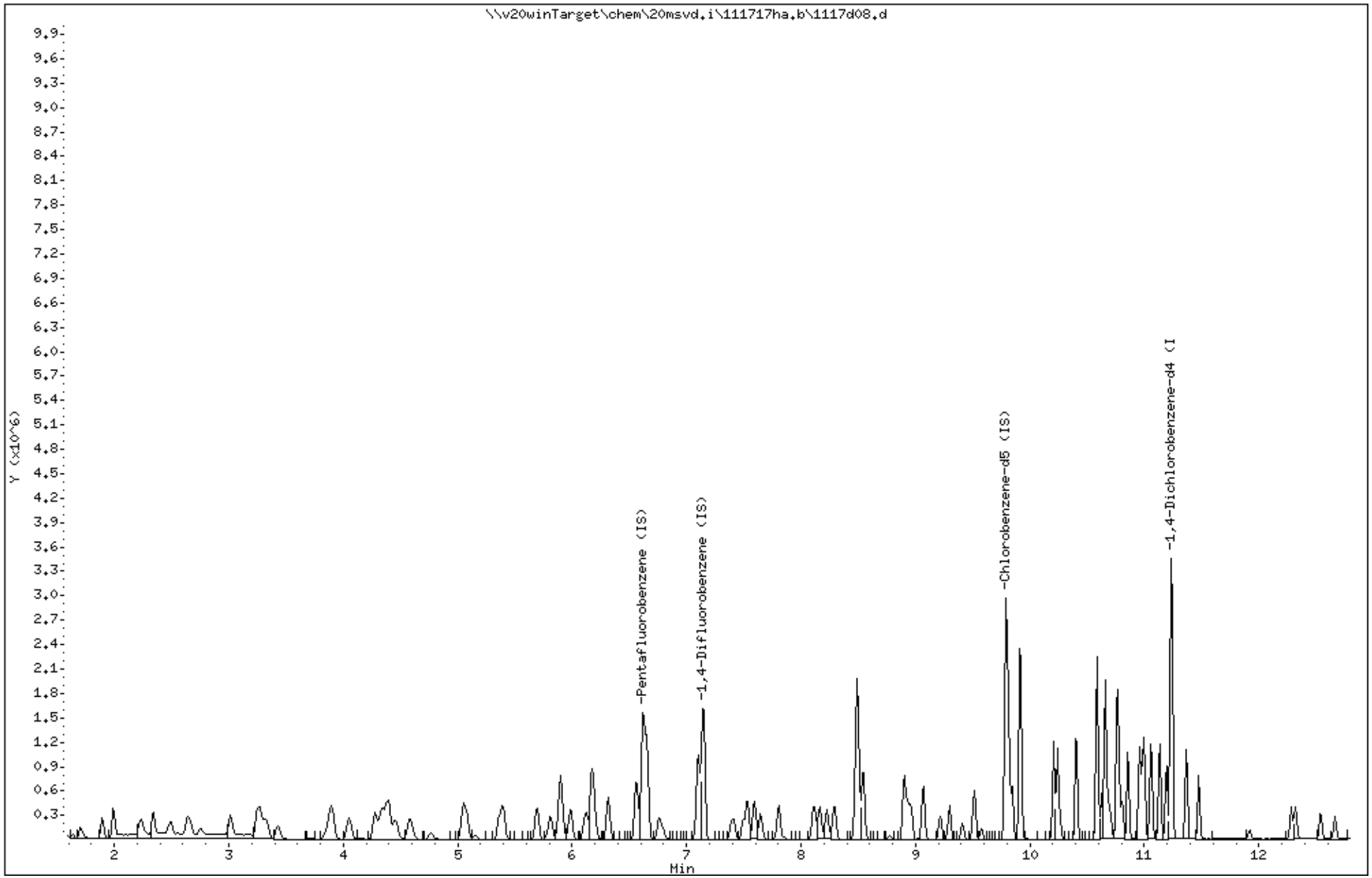








Data File: \\v20winTarget\chem\20msvd.i\111717ha.b\1117d08.d
Date : 17-NOV-2017 10:23
Client ID: CAL4
Instrument: 20msvd.i
Sample Info: CAL4,54439:1
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717ha.b/1117d08.d
Injection Date: 17-NOV-2017 10:23
Instrument: 20msvd.i
Lab Sample ID: CAL4
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d09.d
Lab Smp Id: CAL5 Client Smp ID: CAL5
Inj Date : 17-NOV-2017 10:41
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal5,54440:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:14 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.232	2.237	(0.336)	298733	50.0000	48.6
2 Haloether 406	85	3.879	3.879	(0.583)	542200	50.0000	51.6(M)
3 Isoflurane	117	4.333	4.332	(0.652)	174794	50.0000	50.4
4 Haloether 508	97	4.353	4.357	(0.655)	156282	50.0000	48.9(M)
5 Enflurane	117	4.579	4.584	(0.689)	362499	50.0000	51.1
6 Halomar	81	5.360	5.360	(0.806)	791293	50.0000	50.9
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	387035	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.143	(1.000)	1135526	50.0000	
7 Haloether 421	67	7.406	7.405	(1.037)	696646	50.0000	51.4
8 Haloether 427	151	7.531	7.526	(1.054)	495254	50.0000	51.8
11 Haloether 428	117	8.116	8.111	(1.136)	532008	50.0000	52.1
12 Methoxyflurane	81	8.161	8.161	(1.142)	1046827	50.0000	51.6
13 Haloether 528	211	9.511	9.516	(1.331)	897762	50.0000	52.1
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	548661	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.239	(1.000)	492062	50.0000	

QC Flag Legend

M - Compound response manually integrated.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d09.d
Lab Smp Id: CAL5 Client Smp ID: CAL5
Inj Date : 17-NOV-2017 10:41
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal5,54401:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.698	1.703	(0.255)	396411	50.0000	53.1
2 Chloromethane	50	1.894	1.894	(0.285)	534359	50.0000	51.4
3 Vinyl chloride	62	1.990	1.990	(0.299)	744921	50.0000	50.9
4 Bromomethane	94	2.338	2.338	(0.352)	324092	50.0000	46.4
5 Chloroethane	64	2.484	2.489	(0.374)	360198	50.0000	55.5(H)
6 Trichlorofluoromethane	101	2.645	2.650	(0.398)	721073	50.0000	51.7
7 1,1-Dichloroethene	96	3.244	3.244	(0.488)	332031	50.0000	49.5
8 Carbon disulfide	76	3.270	3.275	(0.492)	1001894	50.0000	49.1
9 1,1,2-Trichlorotrifluoroethane	101	3.310	3.315	(0.498)	370811	50.0000	51.9
10 Iodomethane	142	3.426	3.426	(0.515)	638045	50.0000	51.4
11 Acrolein	56	3.713	3.718	(0.558)	54634	50.0000	38.9
12 Allyl chloride	41	3.894	3.894	(0.586)	643196	50.0000	50.9
13 Methylene Chloride	84	4.045	4.051	(0.608)	342329	50.0000	51.0
14 Acetone	43	4.146	4.146	(0.624)	79482	50.0000	53.0
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.643)	339460	50.0000	49.6
16 Methyl Acetate	74	4.327	4.318	(0.651)	35596	50.0000	50.1
17 n-Hexane	57	4.388	4.388	(0.660)	635643	50.0000	50.0(M)
18 Methyl-tert-butyl ether	73	4.443	4.449	(0.668)	727267	50.0000	51.2
19 Acetonitrile	41	4.761	4.766	(0.716)	318997	500.000	519
20 Chloroprene	53	5.043	5.048	(0.758)	690847	50.0000	52.6
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	793954	50.0000	52.8
22 Acrylonitrile	53	5.149	5.144	(0.774)	109713	50.0000	49.1

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.395	5.396	(0.811)	1584496	50.0000	50.9
	24 cis-1,2-Dichloroethene	96	5.693	5.688	(0.856)	380997	50.0000	50.2
	25 2,2-Dichloropropane	77	5.804	5.804	(0.873)	439386	50.0000	50.6
	26 Cyclohexane	84	5.894	5.889	(0.886)	487836	50.0000	51.6
	27 Bromochloromethane	128	5.894	5.894	(0.886)	175573	50.0000	51.9
	28 Chloroform	83	5.985	5.985	(0.900)	663757	50.0000	51.6
	29 Carbon tetrachloride	117	6.116	6.111	(0.856)	502058	50.0000	52.9
	30 Tetrahydrofuran	42	6.156	6.151	(0.926)	108513	50.0000	51.4
	31 1,1,1-Trichloroethane	97	6.191	6.187	(0.931)	565869	50.0000	51.4
$	32 Dibromofluoromethane (S)	113	6.171	6.166	(0.928)	403320	50.0000	50.1
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	508176	50.0000	51.1
	34 2-Butanone (MEK)	43	6.312	6.312	(0.949)	129532	50.0000	52.2
	35 Benzene	78	6.559	6.559	(0.918)	1360584	50.0000	51.3
	36 Propionitrile	54	6.600	6.600	(0.992)	387065	500.000	500
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	1870619	500.000	510
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	387035	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	503257	50.0000	52.5
	40 Isobutanol	43	6.786	6.786	(1.020)	231009	1050.00	1060
	41 Methylcyclohexane	83	7.098	7.098	(0.994)	548459	50.0000	52.4
	42 Trichloroethene	130	7.108	7.108	(0.995)	395397	50.0000	55.1
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1135526	50.0000	
	44 Dibromomethane	93	7.491	7.491	(1.049)	209667	50.0000	50.9
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	424858	50.0000	52.1
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	461580	50.0000	51.2
	47 Methyl methacrylate	41	7.804	7.809	(1.092)	569367	100.000	100
	48 1,4-Dioxane (p-Dioxane)	88	7.844	7.844	(1.098)	33437	1000.00	1010
	49 2-Chloroethyl vinyl ether	63	8.222	8.227	(1.151)	441542	100.000	104
	50 cis-1,3-Dichloropropene	75	8.287	8.287	(1.160)	565906	50.0000	53.2
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1305780	50.0000	50.1
	52 Toluene	91	8.539	8.539	(1.195)	1447326	50.0000	51.9
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	341341	50.0000	52.3
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	289383	50.0000	52.3
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	479753	50.0000	54.9
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	296797	50.0000	52.3
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	255869	50.0000	53.8
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	331194	50.0000	52.7
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	429046	50.0000	52.1
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	267000	50.0000	52.0
	61 2-Hexanone	43	9.577	9.577	(0.978)	187795	50.0000	47.0
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	548661	50.0000	
	63 Chlorobenzene	112	9.798	9.799	(1.001)	924684	50.0000	51.0
	64 Ethylbenzene	91	9.814	9.814	(1.003)	1595472	50.0000	51.4
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	350866	50.0000	51.6
	66 m&p-Xylene	106	9.914	9.914	(1.013)	1213037	100.000	102
	67 o-Xylene	106	10.206	10.207	(1.043)	556660	50.0000	51.3
	68 Styrene	104	10.242	10.242	(1.046)	918612	50.0000	51.8
	69 Bromoform	173	10.262	10.267	(1.048)	231725	50.0000	54.5
	70 Isopropylbenzene (Cumene)	105	10.403	10.408	(0.926)	1454350	50.0000	51.4
$	71 4-Bromofluorobenzene (S)	176	10.584	10.589	(0.942)	480968	50.0000	49.9
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	217300	100.000	(H)
	73 Bromobenzene	156	10.655	10.655	(0.948)	386871	50.0000	49.9
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	1722808	50.0000	50.8
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.705	(0.952)	305325	50.0000	51.3
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	1068983	50.0000	50.3

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	1102112	50.0000	50.9
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	76446	50.0000	50.6
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	984953	50.0000	50.9
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	628195	50.0000	51.2
81 Pentachloroethane	167	10.982	10.982	(0.978)	248122	50.0000	52.6
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	1063408	50.0000	50.9
83 sec-Butylbenzene	105	11.058	11.063	(0.984)	1330800	50.0000	51.3
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	1099649	50.0000	52.7
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	614816	50.0000	51.7
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	492062	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	627265	50.0000	51.8
88 n-Butylbenzene	91	11.365	11.370	(1.012)	1002000	50.0000	50.7
89 1,2-Dichlorobenzene	146	11.476	11.481	(1.022)	531294	50.0000	50.9
90 1,2-Dibromo-3-chloropropane	157	11.922	11.927	(1.061)	80340	50.0000	54.2
91 Hexachloro-1,3-butadiene	225	12.282	12.287	(1.093)	161010	50.0000	49.7
92 1,2,4-Trichlorobenzene	180	12.322	12.327	(1.097)	259169	50.0000	50.9
93 Naphthalene	128	12.539	12.549	(1.116)	501124	50.0000	50.0
94 1,2,3-Trichlorobenzene	180	12.670	12.675	(1.128)	193718	50.0000	51.2

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d09.d
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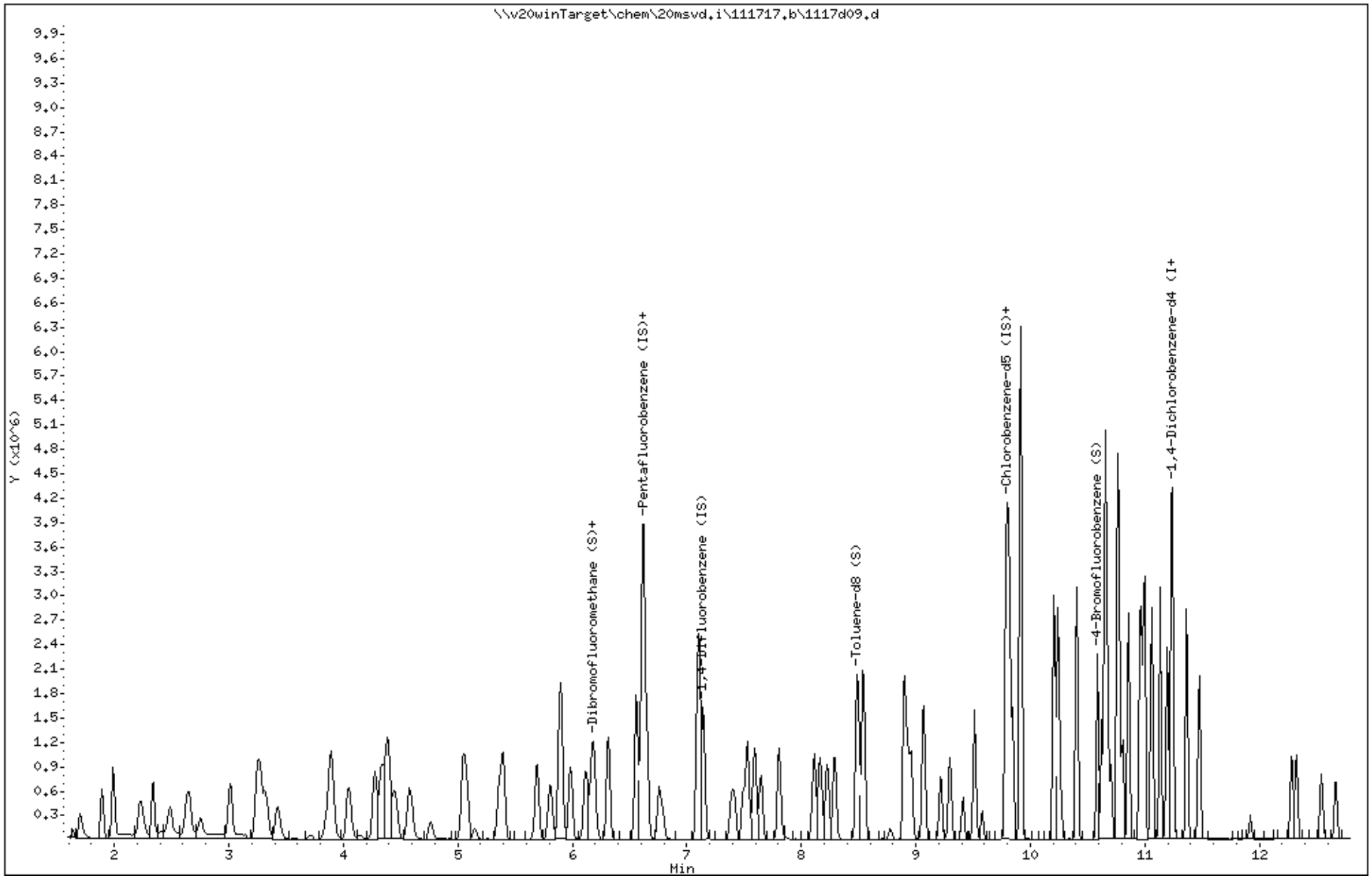
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



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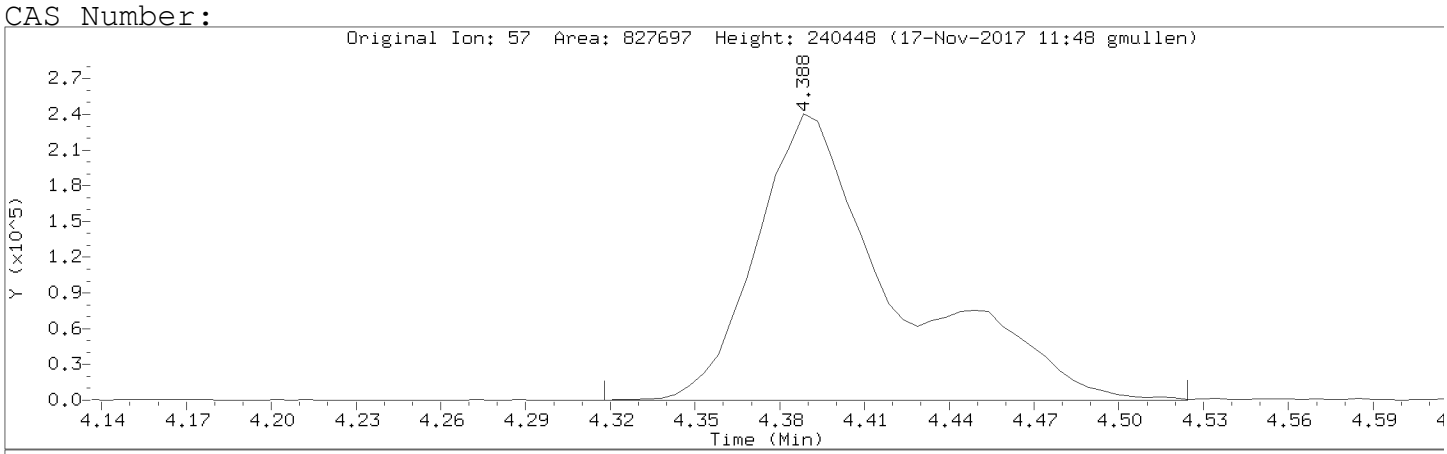
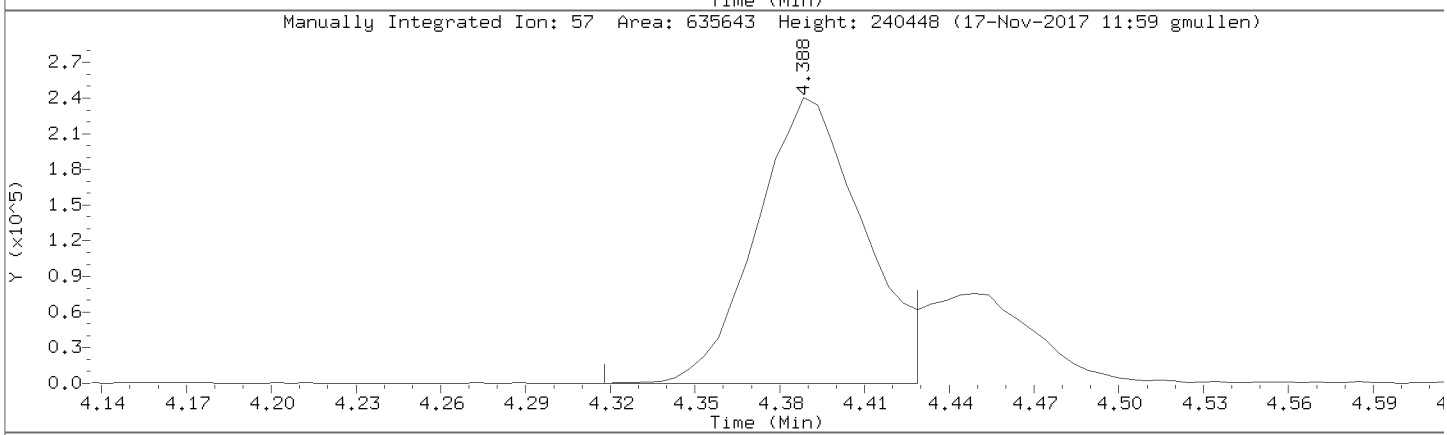
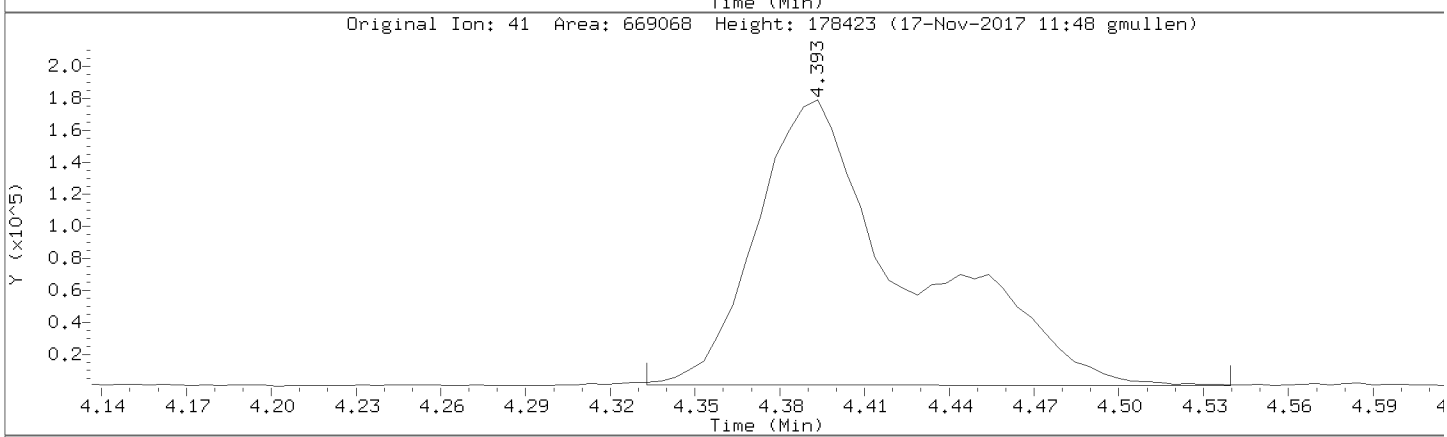
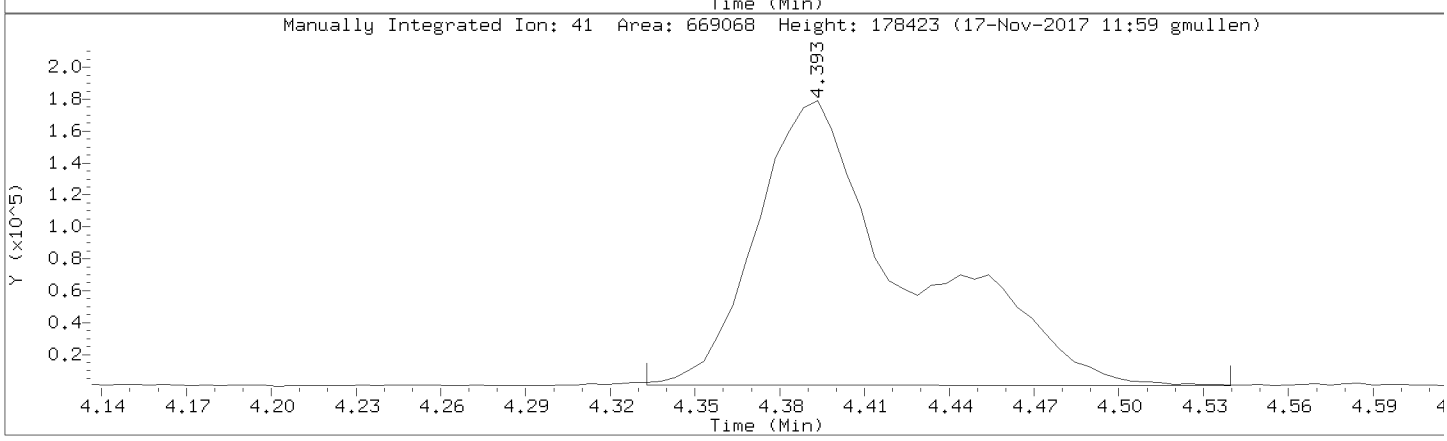
Instrument: 20msvd.i
Lab Sample ID: CAL5

Compound: n-Hexane Review Code: GT
CAS Number:









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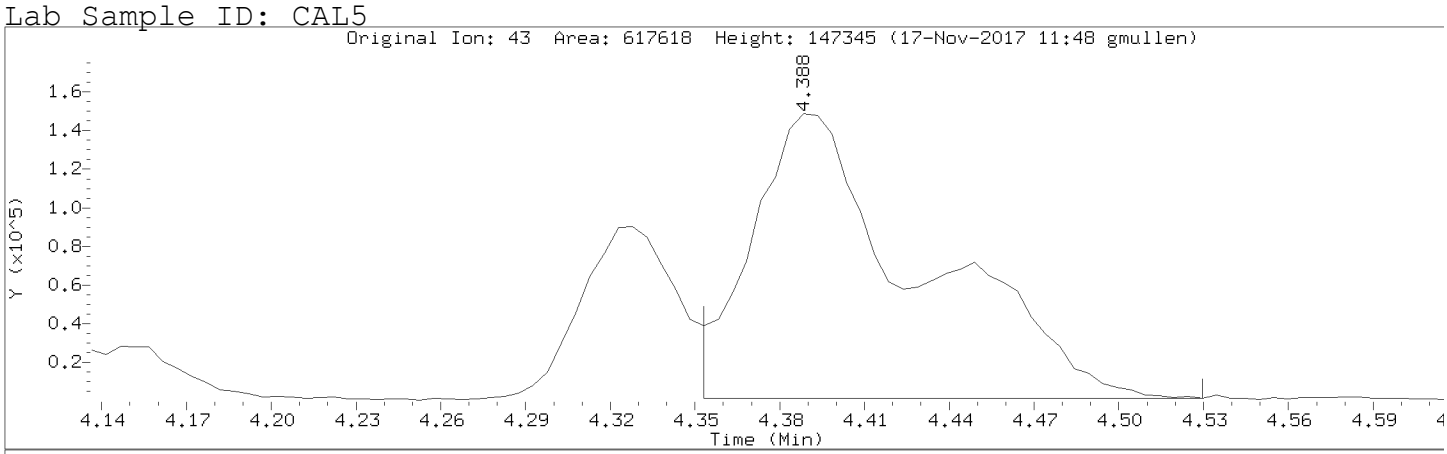
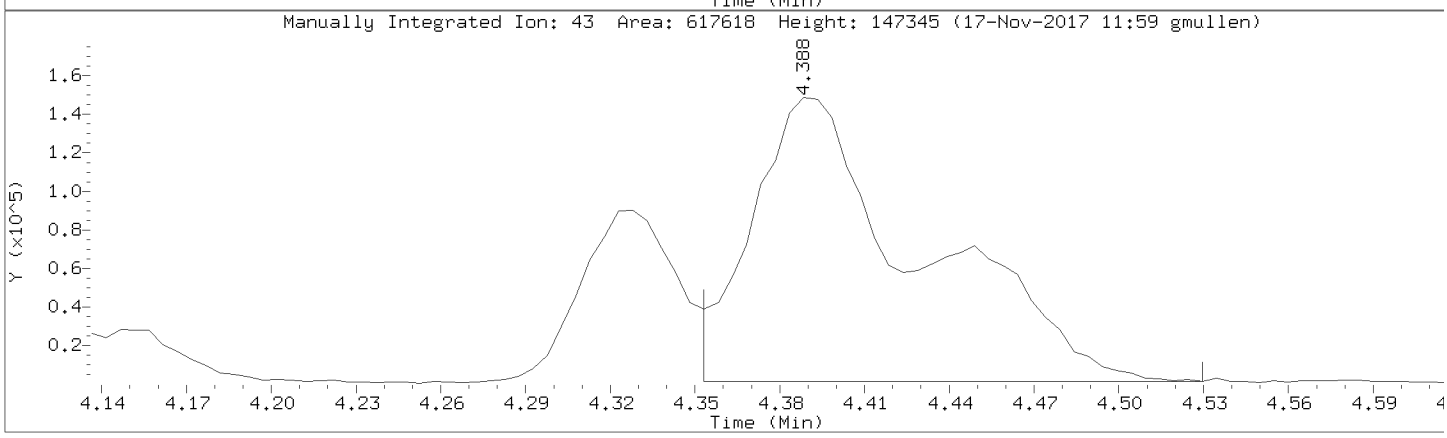
Lab Sample ID: CAL5





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Purge Volume: 5.0
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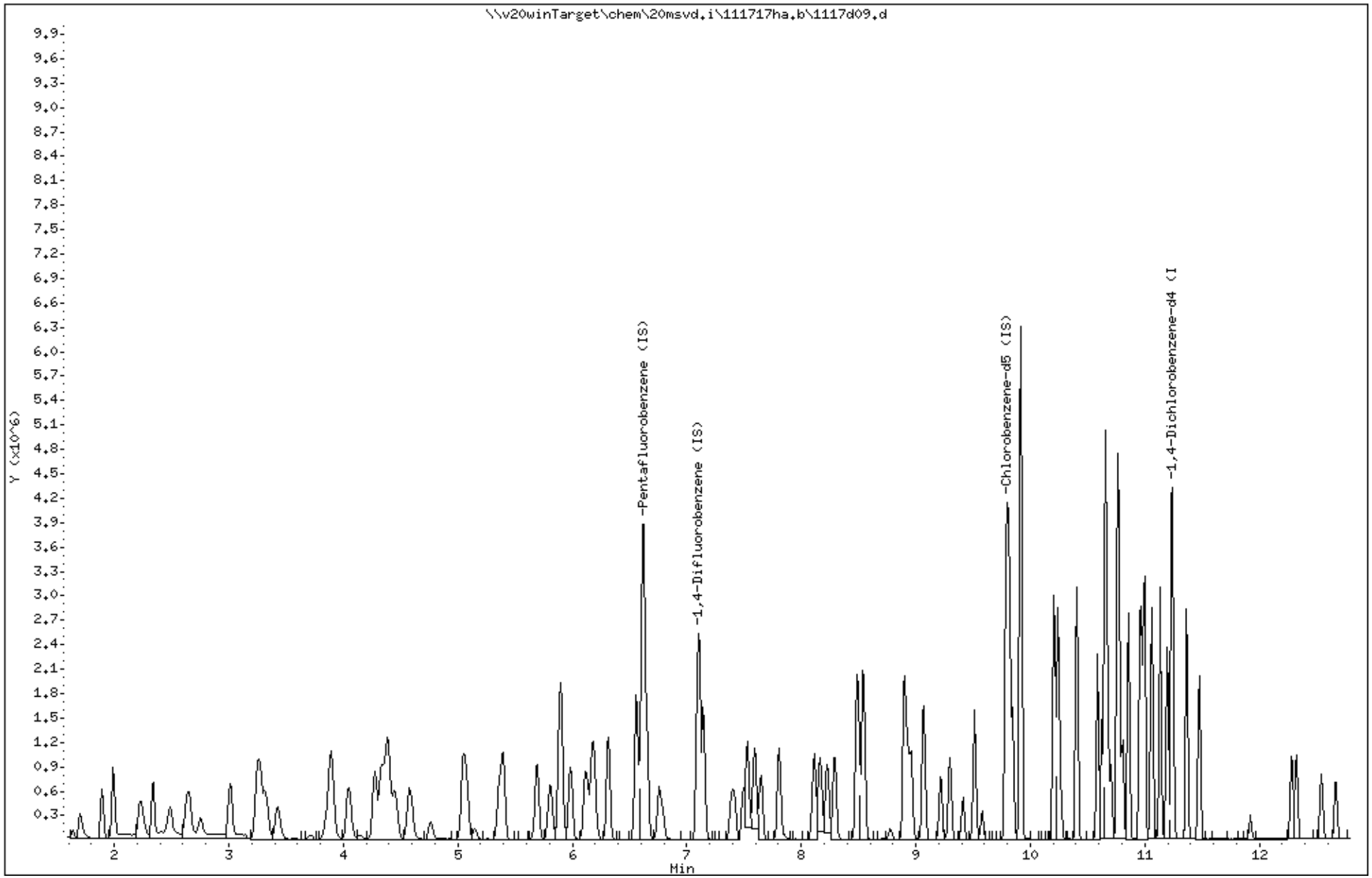

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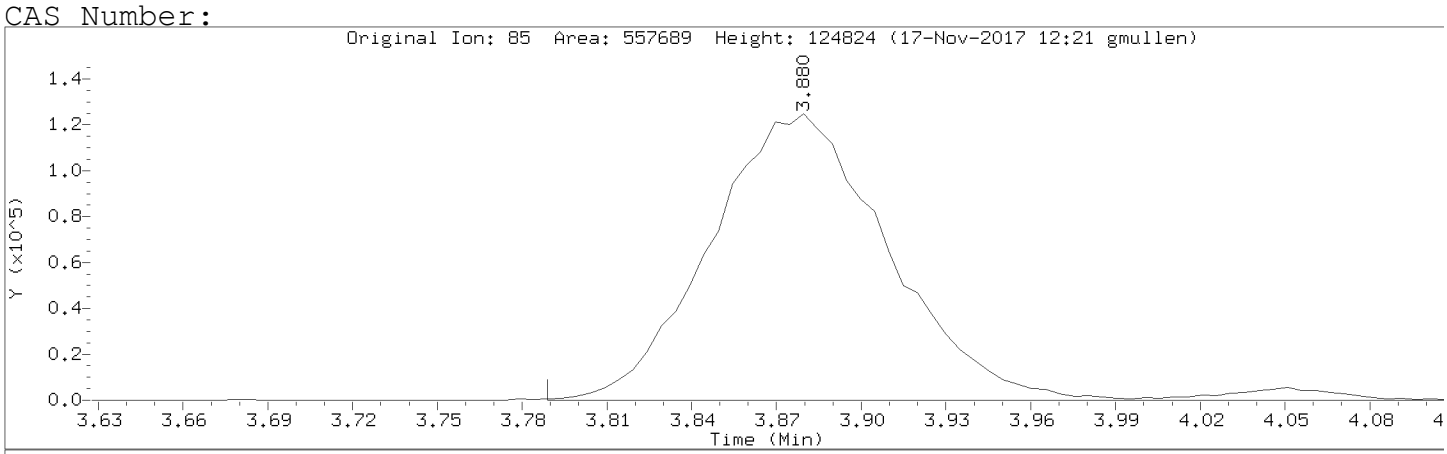
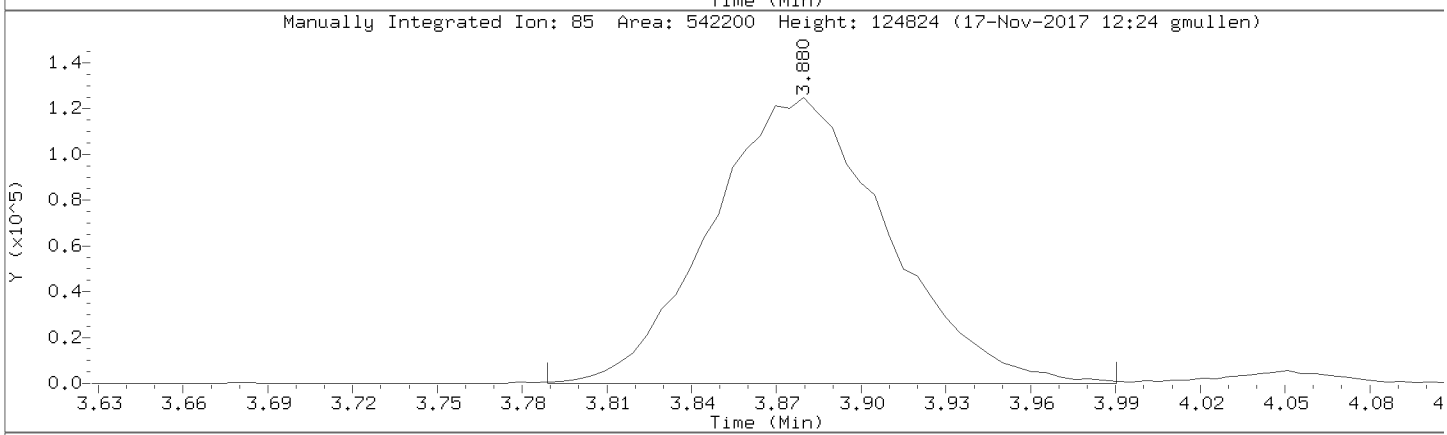
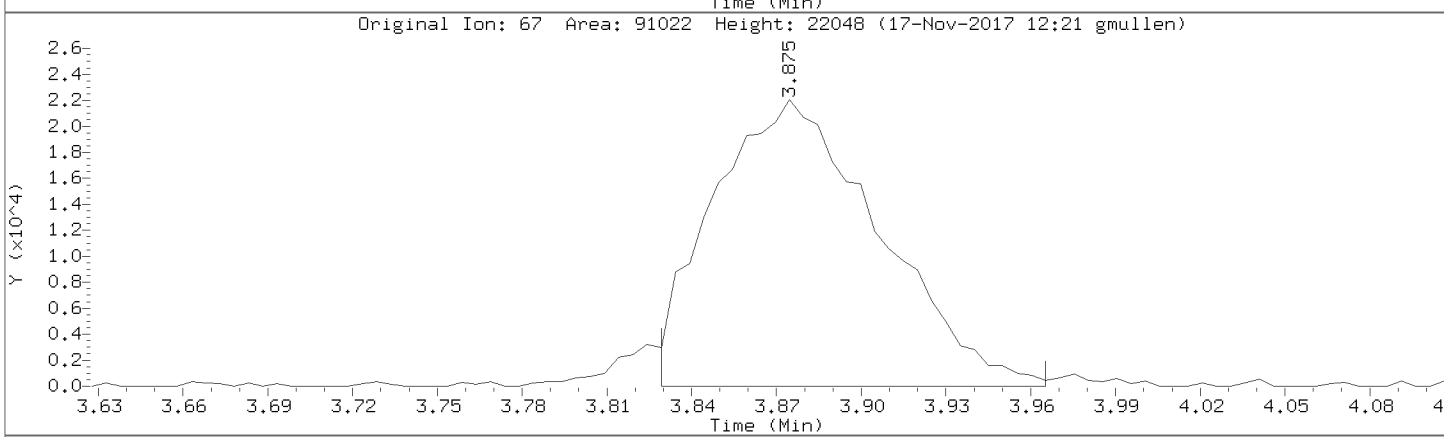
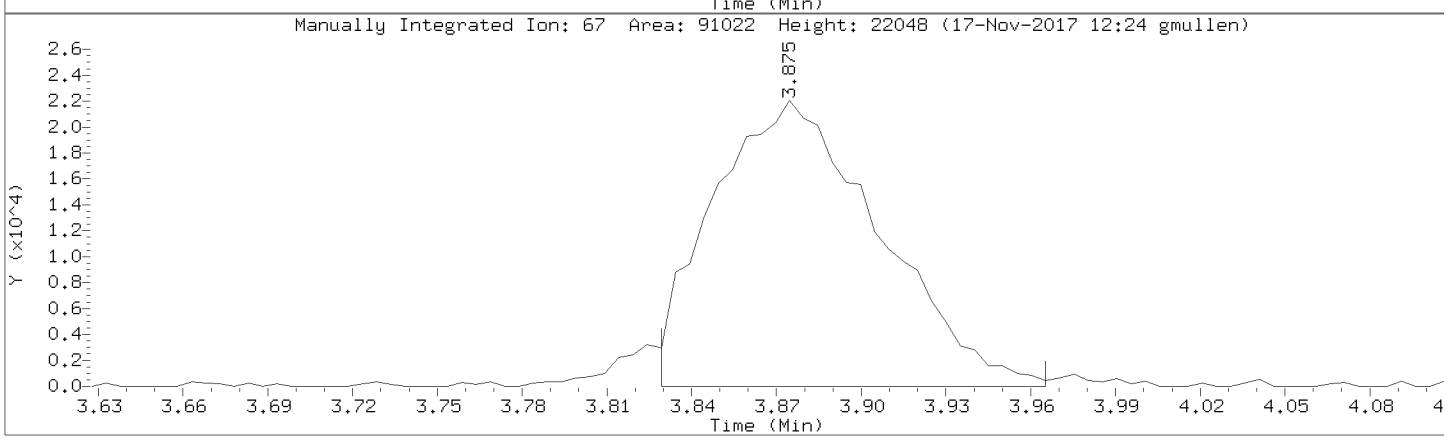
Instrument: 20msvd.i
Lab Sample ID: CAL5

Compound: Haloether 406 Review Code: GT
CAS Number:









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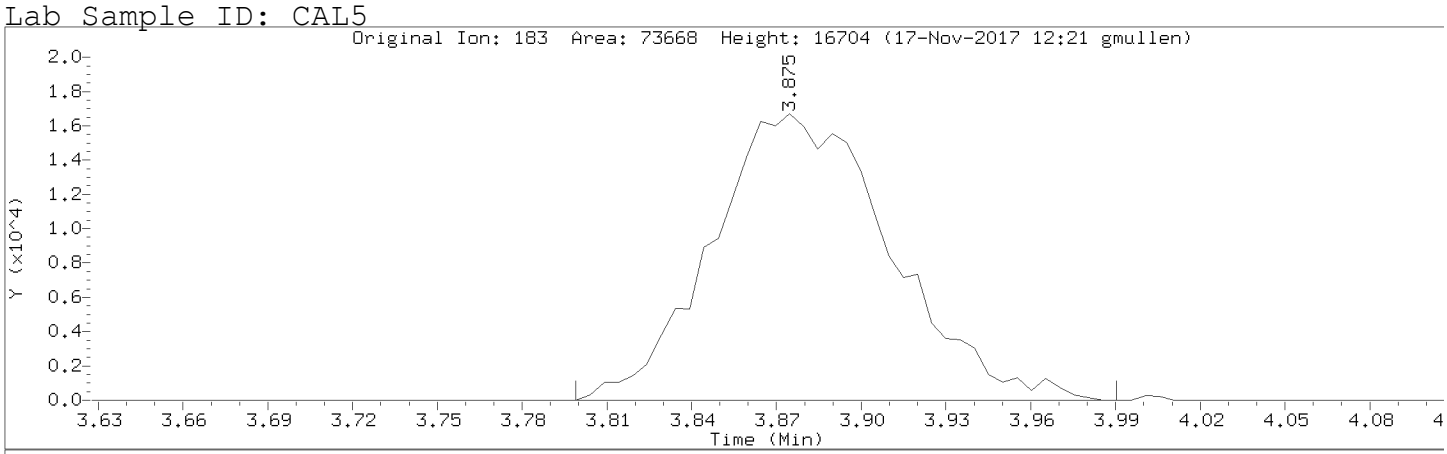
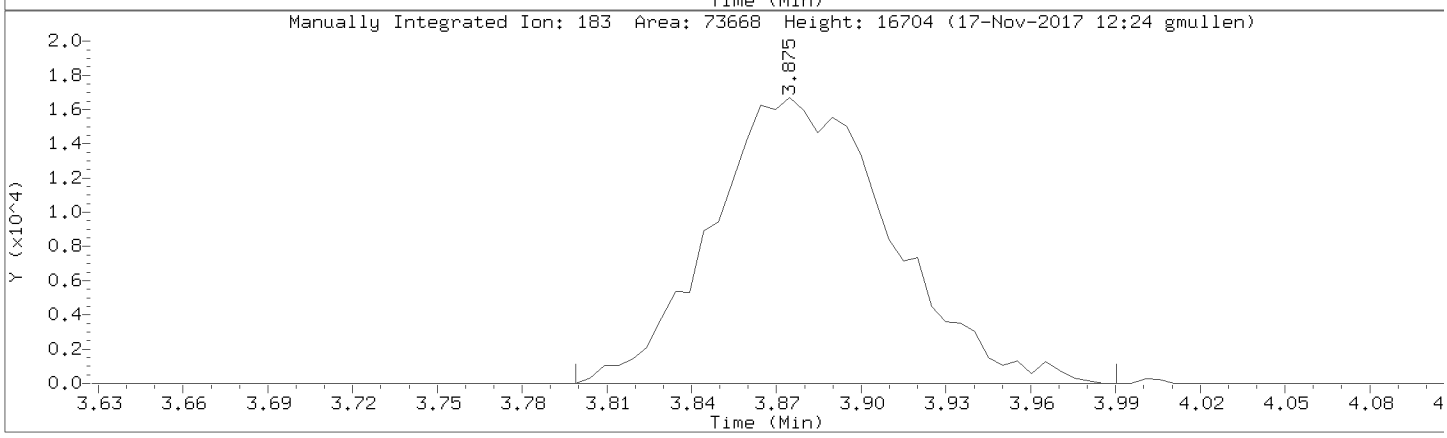
Instrument: 20msvd.i
Lab Sample ID: CAL5





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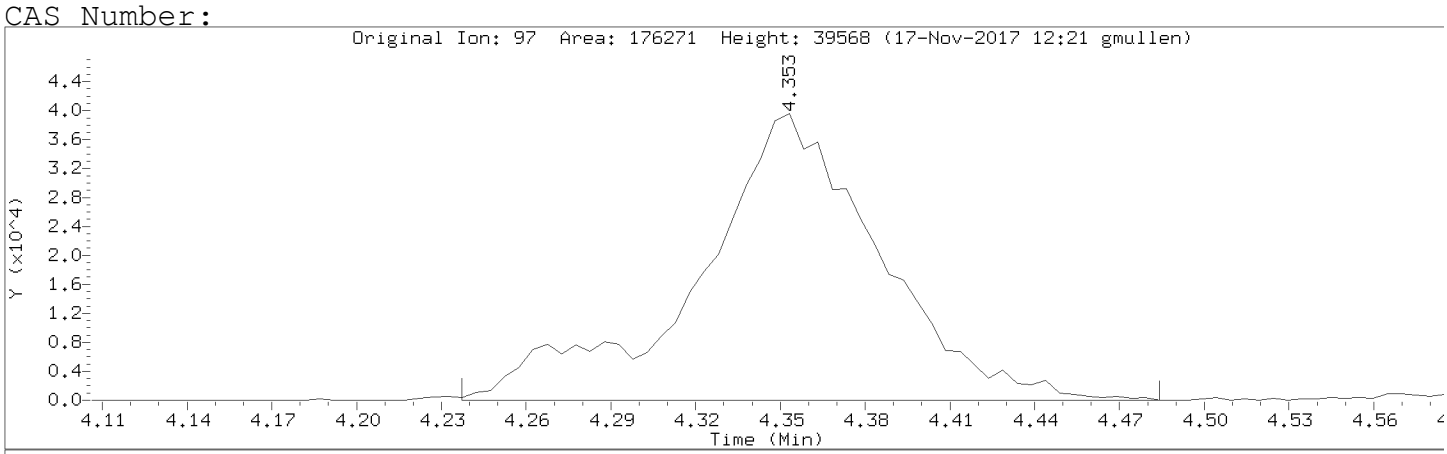
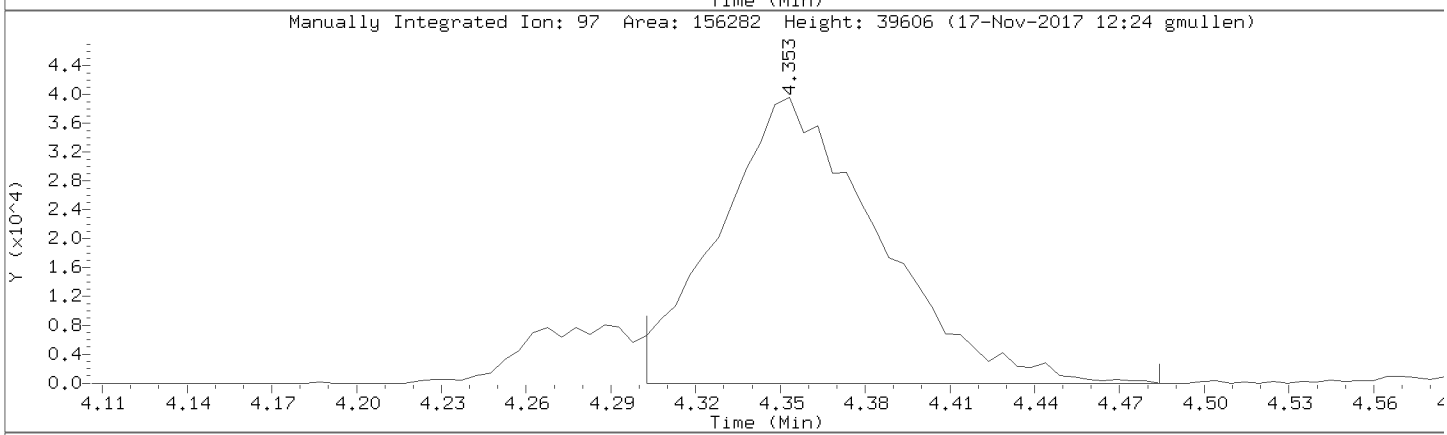
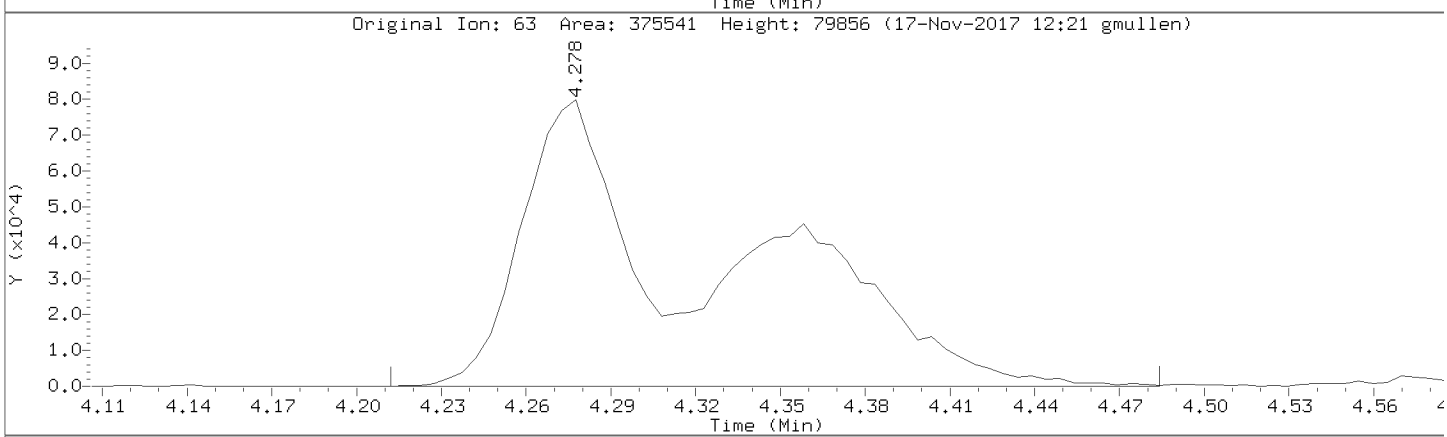
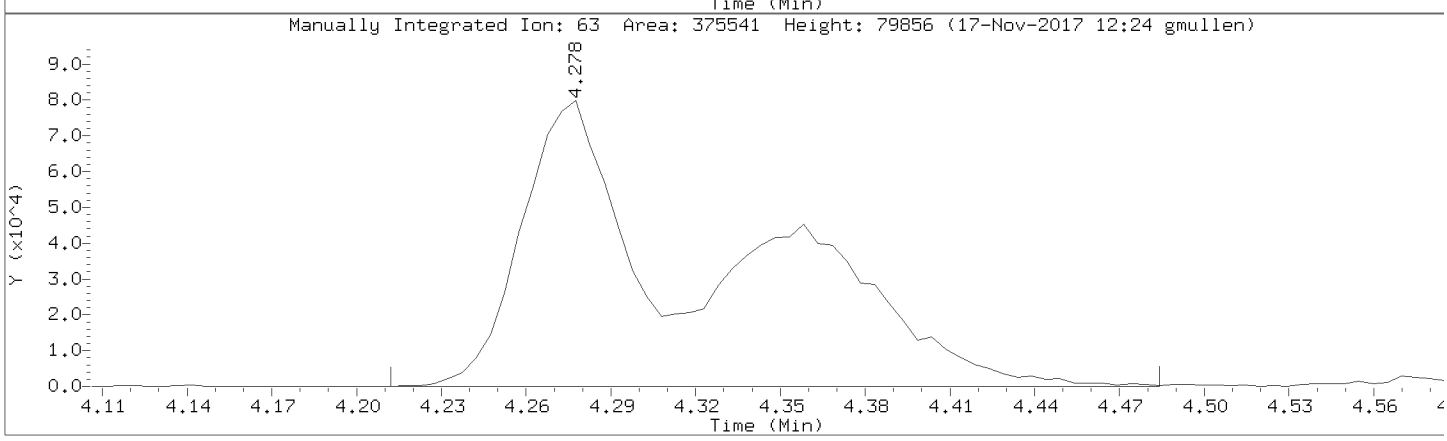
Instrument: 20msvd.i
Lab Sample ID: CAL5

Compound: Haloether 508 Review Code: GT
CAS Number:









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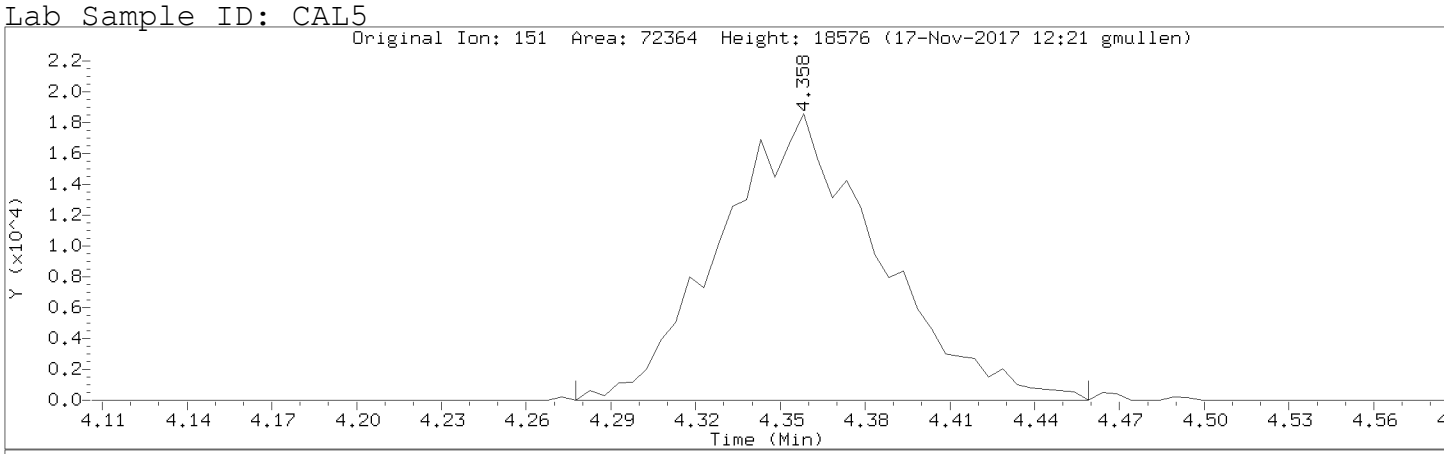
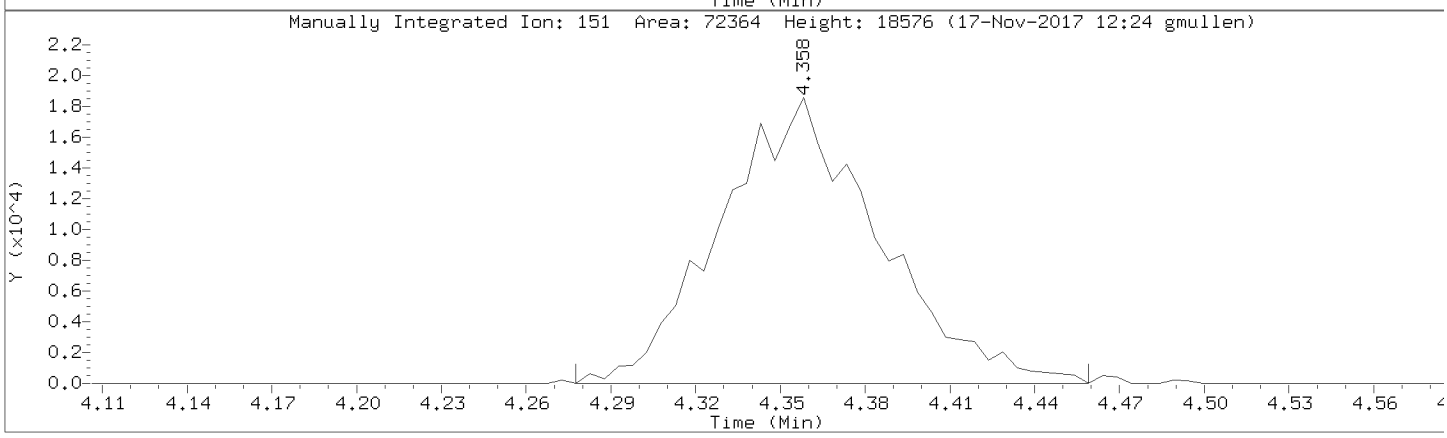
Injection Date: 17-NOV-2017 10:41
Instrument: 20msvd.i
Lab Sample ID: CAL5





Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d10.d
Lab Smp Id: CAL6 Client Smp ID: CAL6
Inj Date : 17-NOV-2017 10:59
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal6,54402:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:59 Cal File: 1117d10.d
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	785096	100.000	103
2 Chloromethane	50	1.894	1.894	(0.285)	1073393	100.000	101
3 Vinyl chloride	62	1.990	1.990	(0.299)	1490208	100.000	99.4
4 Bromomethane	94	2.337	2.338	(0.352)	655617	100.000	91.6
5 Chloroethane	64	2.458	2.489	(0.370)	661184	100.000	85.2(H)
6 Trichlorofluoromethane	101	2.645	2.650	(0.398)	1475896	100.000	103
7 1,1-Dichloroethene	96	3.244	3.244	(0.488)	681616	100.000	98.6
8 Carbon disulfide	76	3.269	3.275	(0.492)	2052731	100.000	98.3
9 1,1,2-Trichlorotrifluoroethane	101	3.315	3.315	(0.499)	766372	100.000	104
10 Iodomethane	142	3.425	3.426	(0.515)	1289387	100.000	101
11 Acrolein	56	3.708	3.718	(0.558)	112043	100.000	77.9
12 Allyl chloride	41	3.894	3.894	(0.586)	1301947	100.000	101
13 Methylene Chloride	84	4.045	4.051	(0.608)	683026	100.000	100
14 Acetone	43	4.151	4.146	(0.624)	145588	100.000	95.7
15 trans-1,2-Dichloroethene	96	4.272	4.277	(0.642)	705401	100.000	101
16 Methyl Acetate	74	4.322	4.318	(0.650)	70541	100.000	96.9
17 n-Hexane	57	4.388	4.388	(0.660)	1350852	100.000	104
18 Methyl-tert-butyl ether	73	4.448	4.449	(0.669)	1479564	100.000	102
19 Acetonitrile	41	4.760	4.766	(0.716)	625980	1000.00	995
20 Chloroprene	53	5.048	5.048	(0.759)	1401991	100.000	104
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	1605594	100.000	104
22 Acrylonitrile	53	5.153	5.144	(0.775)	222152	100.000	97.1

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.395	5.396	(0.811)	3228163	100.000	101
	24 cis-1,2-Dichloroethene	96	5.692	5.688	(0.856)	777516	100.000	99.9
	25 2,2-Dichloropropane	77	5.808	5.804	(0.873)	857848	100.000	96.4
	26 Cyclohexane	84	5.899	5.889	(0.887)	966242	100.000	99.7
	27 Bromochloromethane	128	5.899	5.894	(0.887)	363314	100.000	105
	28 Chloroform	83	5.985	5.985	(0.900)	1343657	100.000	102
	29 Carbon tetrachloride	117	6.116	6.111	(0.856)	1030474	100.000	104
	30 Tetrahydrofuran	42	6.146	6.151	(0.924)	210751	100.000	97.8
	31 1,1,1-Trichloroethane	97	6.191	6.187	(0.931)	1135215	100.000	101
$	32 Dibromofluoromethane (S)	113	6.171	6.166	(0.928)	423392	50.0000	51.4
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	1009051	100.000	96.8
	34 2-Butanone (MEK)	43	6.317	6.312	(0.950)	246783	100.000	97.4
	35 Benzene	78	6.559	6.559	(0.918)	2728159	100.000	98.1
	36 Propionitrile	54	6.604	6.600	(0.993)	810684	1000.00	1020
	37 Methacrylonitrile	41	6.619	6.620	(0.995)	3821760	1000.00	1020
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	396616	50.0000	
	39 1,2-Dichloroethane	62	6.760	6.756	(0.946)	1019120	100.000	101
	40 Isobutanol	43	6.786	6.786	(1.020)	441751	2100.00	1980
	41 Methylcyclohexane	83	7.098	7.098	(0.994)	1086610	100.000	99.1
	42 Trichloroethene	130	7.108	7.108	(0.995)	794257	100.000	106
*	43 1,4-Difluorobenzene (IS)	114	7.143	7.144	(1.000)	1190429	50.0000	
	44 Dibromomethane	93	7.491	7.491	(1.049)	421837	100.000	97.8
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	852441	100.000	99.8
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	935398	100.000	99.0
	47 Methyl methacrylate	41	7.803	7.809	(1.092)	1158758	200.000	194
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.844	(1.099)	69604	2000.00	2010
	49 2-Chloroethyl vinyl ether	63	8.226	8.227	(1.152)	896283	200.000	202
	50 cis-1,3-Dichloropropene	75	8.292	8.287	(1.161)	1133636	100.000	102
$	51 Toluene-d8 (S)	98	8.488	8.489	(1.188)	1349570	50.0000	49.4
	52 Toluene	91	8.544	8.539	(1.196)	2925162	100.000	100
	53 Tetrachloroethene	164	8.901	8.902	(0.909)	714161	100.000	106
	54 4-Methyl-2-Pentanone	43	8.906	8.902	(0.910)	564185	100.000	98.6
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	958874	100.000	105
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	580599	100.000	97.6
	57 1,1,2-Trichloroethane	97	9.073	9.068	(1.270)	501034	100.000	100
	58 Dibromochloromethane	129	9.219	9.214	(0.942)	681586	100.000	105
	59 1,3-Dichloropropane	76	9.299	9.300	(0.950)	846040	100.000	99.2
	60 1,2-Dibromoethane (EDB)	107	9.410	9.411	(1.317)	529654	100.000	98.4
	61 2-Hexanone	43	9.576	9.577	(0.978)	372051	100.000	90.0
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	567629	50.0000	
	63 Chlorobenzene	112	9.798	9.799	(1.001)	1917353	100.000	102
	64 Ethylbenzene	91	9.813	9.814	(1.003)	3275538	100.000	102
	65 1,1,1,2-Tetrachloroethane	131	9.843	9.844	(1.006)	710080	100.000	101
	66 m&p-Xylene	106	9.914	9.914	(1.013)	2515147	200.000	205
	67 o-Xylene	106	10.206	10.207	(1.043)	1167819	100.000	104
	68 Styrene	104	10.241	10.242	(1.046)	1859850	100.000	101
	69 Bromoform	173	10.262	10.267	(1.048)	484876	100.000	110
	70 Isopropylbenzene (Cumene)	105	10.408	10.408	(0.926)	3008236	100.000	102
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	505161	50.0000	50.2
	72 trans-1,4-Dichloro-2-butene	88	10.624	10.625	(0.946)	439361	200.000	194(H)
	73 Bromobenzene	156	10.655	10.655	(0.948)	812876	100.000	100
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	3516624	100.000	99.3
	75 1,1,2,2-Tetrachloroethane	83	10.705	10.705	(0.953)	595340	100.000	95.9
	76 2-Chlorotoluene	91	10.760	10.761	(0.958)	2243979	100.000	101

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.770	10.771	(0.959)	2300076	100.000	102
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	158869	100.000	101
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	2002365	100.000	99.2
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	1304215	100.000	102
81 Pentachloroethane	167	10.982	10.982	(0.978)	513984	100.000	104
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	2193224	100.000	100
83 sec-Butylbenzene	105	11.058	11.063	(0.984)	2749249	100.000	102
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	2290833	100.000	105
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	1265011	100.000	102
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	513486	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	1282194	100.000	102
88 n-Butylbenzene	91	11.365	11.370	(1.012)	2042242	100.000	99.0
89 1,2-Dichlorobenzene	146	11.476	11.481	(1.022)	1093515	100.000	100
90 1,2-Dibromo-3-chloropropane	157	11.922	11.927	(1.061)	161086	100.000	104
91 Hexachloro-1,3-butadiene	225	12.287	12.287	(1.094)	335524	100.000	99.3
92 1,2,4-Trichlorobenzene	180	12.322	12.327	(1.097)	552085	100.000	104
93 Naphthalene	128	12.544	12.549	(1.117)	1027394	100.000	98.3
94 1,2,3-Trichlorobenzene	180	12.670	12.675	(1.128)	406013	100.000	103

QC Flag Legend

H - Operator selected an alternate compound hit.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d10.d
Lab Smp Id: CAL6 Client Smp ID: CAL6
Inj Date : 17-NOV-2017 10:59
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal6,54441:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:14 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:59 Cal File: 1117d10.d
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

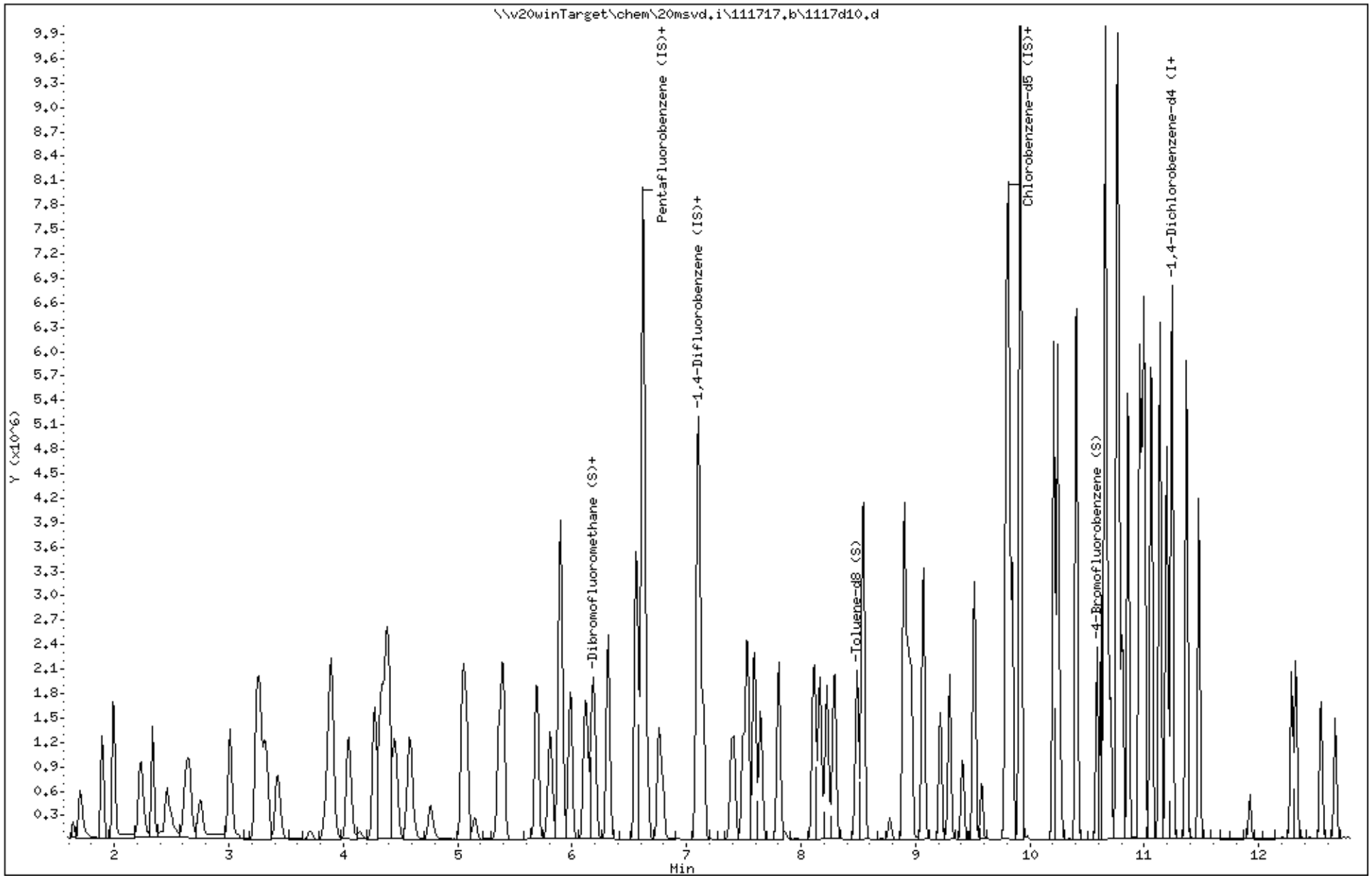
Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.231	2.237	(0.336)	594261	100.000	94.4
2 Haloether 406	85	3.874	3.879	(0.583)	1105425	100.000	104
3 Isoflurane	117	4.337	4.332	(0.652)	363780	100.000	108
4 Haloether 508	97	4.357	4.357	(0.655)	320797	100.000	110
5 Enflurane	117	4.579	4.584	(0.689)	737362	100.000	104
6 Halomar	81	5.360	5.360	(0.806)	1600714	100.000	100
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	396616	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.143	7.143	(1.000)	1192011	50.0000	
7 Haloether 421	67	7.410	7.405	(1.037)	1414499	100.000	99.3
8 Haloether 427	151	7.531	7.526	(1.054)	1048955	100.000	104
11 Haloether 428	117	8.116	8.111	(1.136)	1106794	100.000	103
12 Methoxyflurane	81	8.166	8.161	(1.143)	2108686	100.000	98.9
13 Haloether 528	211	9.516	9.516	(1.332)	1879007	100.000	104
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	567629	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.239	(1.000)	513486	50.0000	

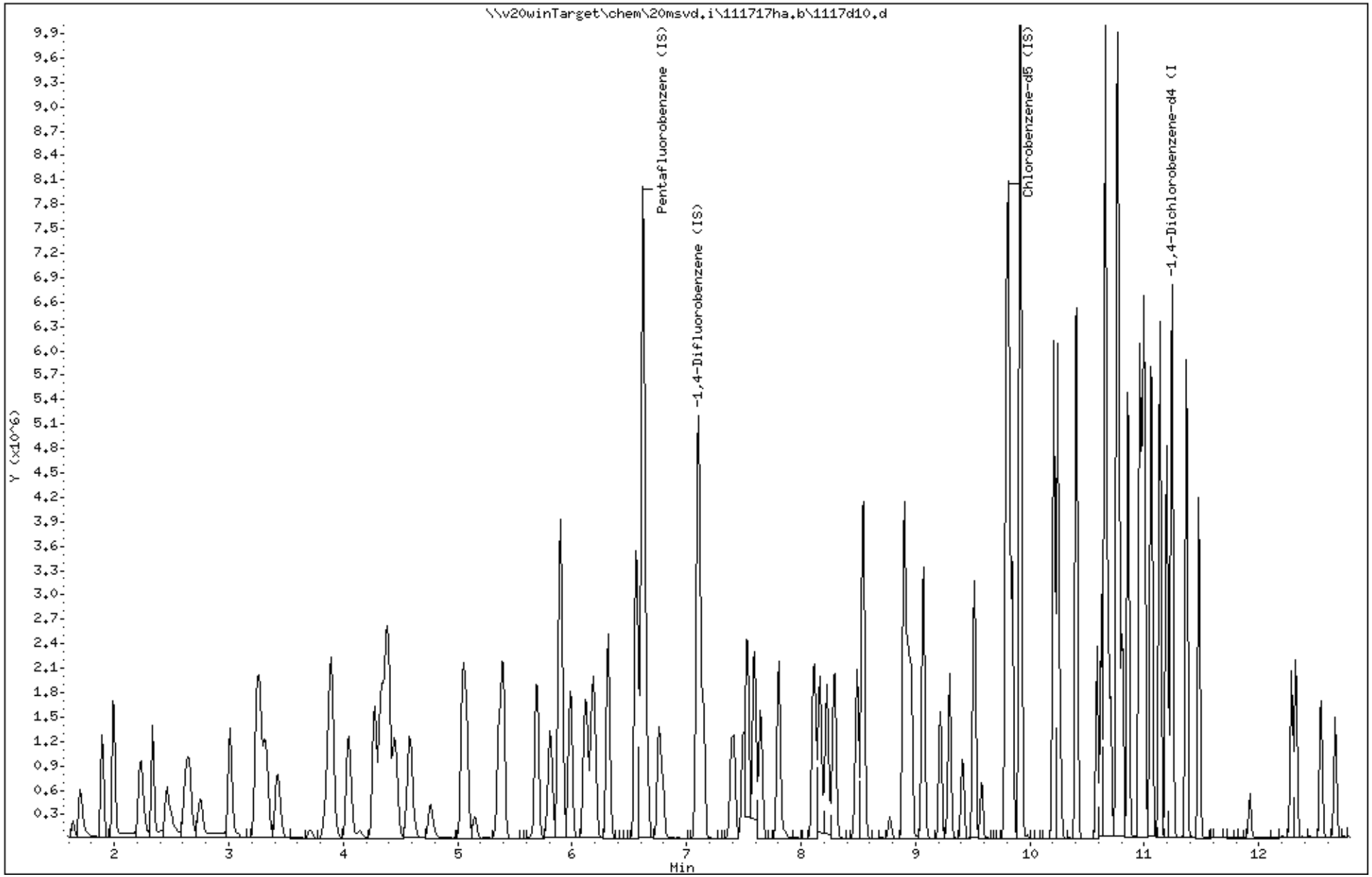
Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d10.d
Date : 17-NOV-2017 10:59
Client ID: CAL6
Sample Info: CAL6,54402:1
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d10.d
Injection Date: 17-NOV-2017 10:59
Instrument: 20msvd.i
Lab Sample ID: CAL6
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\111717ha.b\1117d10.d
Date : 17-NOV-2017 10:59
Client ID: CAL6
Instrument: 20msvd.i
Sample Info: CAL6,54441:1
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717ha.b/1117d10.d
Injection Date: 17-NOV-2017 10:59
Instrument: 20msvd.i
Lab Sample ID: CAL6
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d11.d
Lab Smp Id: CAL7 Client Smp ID: CAL7
Inj Date : 17-NOV-2017 11:16
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal7,54442:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:14 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 11:16 Cal File: 1117d11.d
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.232	2.237	(0.336)	1315521	200.000	215
2 Haloether 406	85	3.874	3.879	(0.583)	2204445	200.000	217
3 Isoflurane	117	4.338	4.332	(0.652)	727441	200.000	262(A)
4 Haloether 508	97	4.353	4.357	(0.655)	649629	200.000	264(A)
5 Enflurane	117	4.585	4.584	(0.689)	1528680	200.000	240
6 Halomar	81	5.360	5.360	(0.806)	3295532	200.000	206
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	407814	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.143	(1.000)	1210743	50.0000	
7 Haloether 421	67	7.396	7.405	(1.035)	2894548	200.000	212
8 Haloether 427	151	7.532	7.526	(1.054)	2125814	200.000	224
11 Haloether 428	117	8.116	8.111	(1.136)	2284870	200.000	214
12 Methoxyflurane	81	8.166	8.161	(1.143)	4401079	200.000	210
13 Haloether 528	211	9.516	9.516	(1.332)	4111153	200.000	227
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	583454	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.239	(1.000)	542087	50.0000	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d11.d
Lab Smp Id: CAL7 Client Smp ID: CAL7
Inj Date : 17-NOV-2017 11:16
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal7,54403:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 11:16 Cal File: 1117d11.d
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.698	1.703	(0.255)	1552041	200.000	197
2 Chloromethane	50	1.894	1.894	(0.285)	2192721	200.000	200(A)
3 Vinyl chloride	62	1.995	1.990	(0.300)	2862522	200.000	186
4 Bromomethane	94	2.333	2.338	(0.351)	1365043	200.000	186
5 Chloroethane	64	2.449	2.489	(0.368)	616501	200.000	90.1(H)
6 Trichlorofluoromethane	101	2.610	2.650	(0.392)	3043359	200.000	207(A)
7 1,1-Dichloroethene	96	3.244	3.244	(0.488)	1431230	200.000	201(A)
8 Carbon disulfide	76	3.265	3.275	(0.491)	4288340	200.000	200
9 1,1,2-Trichlorotrifluoroethane	101	3.315	3.315	(0.499)	1542178	200.000	205(A)
10 Iodomethane	142	3.421	3.426	(0.514)	2676780	200.000	204(A)
11 Acrolein	56	3.713	3.718	(0.558)	232586	200.000	157
12 Allyl chloride	41	3.889	3.894	(0.585)	2716630	200.000	204(A)
13 Methylene Chloride	84	4.045	4.051	(0.608)	1398604	200.000	200
14 Acetone	43	4.146	4.146	(0.624)	312397	200.000	201(A)
15 trans-1,2-Dichloroethene	96	4.272	4.277	(0.642)	1453989	200.000	202(A)
16 Methyl Acetate	74	4.328	4.318	(0.651)	154006	200.000	206(A)
17 n-Hexane	57	4.383	4.388	(0.659)	2694135	200.000	201(A)
18 Methyl-tert-butyl ether	73	4.449	4.449	(0.669)	3110450	200.000	208(A)
19 Acetonitrile	41	4.766	4.766	(0.717)	1301892	2000.00	2010(A)
20 Chloroprene	53	5.043	5.048	(0.758)	2908770	200.000	210(A)
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	3327715	200.000	210(A)
22 Acrylonitrile	53	5.149	5.144	(0.774)	460732	200.000	196

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.396	5.396	(0.811)	6959354	200.000	212(A)
	24 cis-1,2-Dichloroethene	96	5.688	5.688	(0.855)	1641722	200.000	205(A)
	25 2,2-Dichloropropane	77	5.809	5.804	(0.874)	1648316	200.000	180
	26 Cyclohexane	84	5.894	5.889	(0.886)	1989513	200.000	200
	27 Bromochloromethane	128	5.899	5.894	(0.887)	780565	200.000	219(A)
	28 Chloroform	83	5.985	5.985	(0.900)	2760589	200.000	203(A)
	29 Carbon tetrachloride	117	6.116	6.111	(0.856)	2173052	200.000	215(A)
	30 Tetrahydrofuran	42	6.151	6.151	(0.925)	443914	200.000	201(A)
	31 1,1,1-Trichloroethane	97	6.187	6.187	(0.930)	2287072	200.000	197
$	32 Dibromofluoromethane (S)	113	6.171	6.166	(0.928)	430424	50.0000	50.8
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	2041006	200.000	192
	34 2-Butanone (MEK)	43	6.312	6.312	(0.949)	522352	200.000	201(A)
	35 Benzene	78	6.559	6.559	(0.918)	5672204	200.000	201(A)
	36 Propionitrile	54	6.605	6.600	(0.993)	1761664	2000.00	2160(A)
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	8424460	2000.00	2180(A)
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	407814	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	2166683	200.000	212(A)
	40 Isobutanol	43	6.791	6.786	(1.021)	943020	4200.00	4120
	41 Methylcyclohexane	83	7.098	7.098	(0.994)	2251167	200.000	202(A)
	42 Trichloroethene	130	7.108	7.108	(0.995)	1716391	200.000	224(A)
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1210743	50.0000	
	44 Dibromomethane	93	7.491	7.491	(1.049)	896592	200.000	204(A)
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	1773020	200.000	204(A)
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	1987514	200.000	207(A)
	47 Methyl methacrylate	41	7.804	7.809	(1.092)	2485743	400.000	409(A)
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.844	(1.099)	145185	4000.00	4110(A)
	49 2-Chloroethyl vinyl ether	63	8.227	8.227	(1.152)	1884210	400.000	418(A)
	50 cis-1,3-Dichloropropene	75	8.292	8.287	(1.161)	2332024	200.000	206(A)
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1368980	50.0000	49.3
	52 Toluene	91	8.544	8.539	(1.196)	6053539	200.000	203(A)
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	1494374	200.000	215(A)
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	1196897	200.000	204(A)
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	2014025	200.000	216(A)
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	1236167	200.000	204(A)
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	1092810	200.000	215(A)
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	1482818	200.000	222(A)
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	1785959	200.000	204(A)
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	1126161	200.000	206(A)
	61 2-Hexanone	43	9.577	9.577	(0.978)	789657	200.000	186
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	583454	50.0000	
	63 Chlorobenzene	112	9.804	9.799	(1.002)	4113197	200.000	213(A)
	64 Ethylbenzene	91	9.814	9.814	(1.003)	6879373	200.000	209(A)
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	1525730	200.000	211(A)
	66 m&p-Xylene	106	9.914	9.914	(1.013)	5632208	400.000	447(A)
	67 o-Xylene	106	10.207	10.207	(1.043)	2463102	200.000	213(A)
	68 Styrene	104	10.242	10.242	(1.046)	3981384	200.000	211(A)
	69 Bromoform	173	10.262	10.267	(1.048)	1052351	200.000	233(A)
	70 Isopropylbenzene (Cumene)	105	10.403	10.408	(0.926)	6307913	200.000	202(A)
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	516068	50.0000	48.6
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	967053	400.000	403(AH)
	73 Bromobenzene	156	10.655	10.655	(0.948)	1838205	200.000	215(A)
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	7501829	200.000	201(A)
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.705	(0.952)	1232376	200.000	188
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	4847794	200.000	207(A)

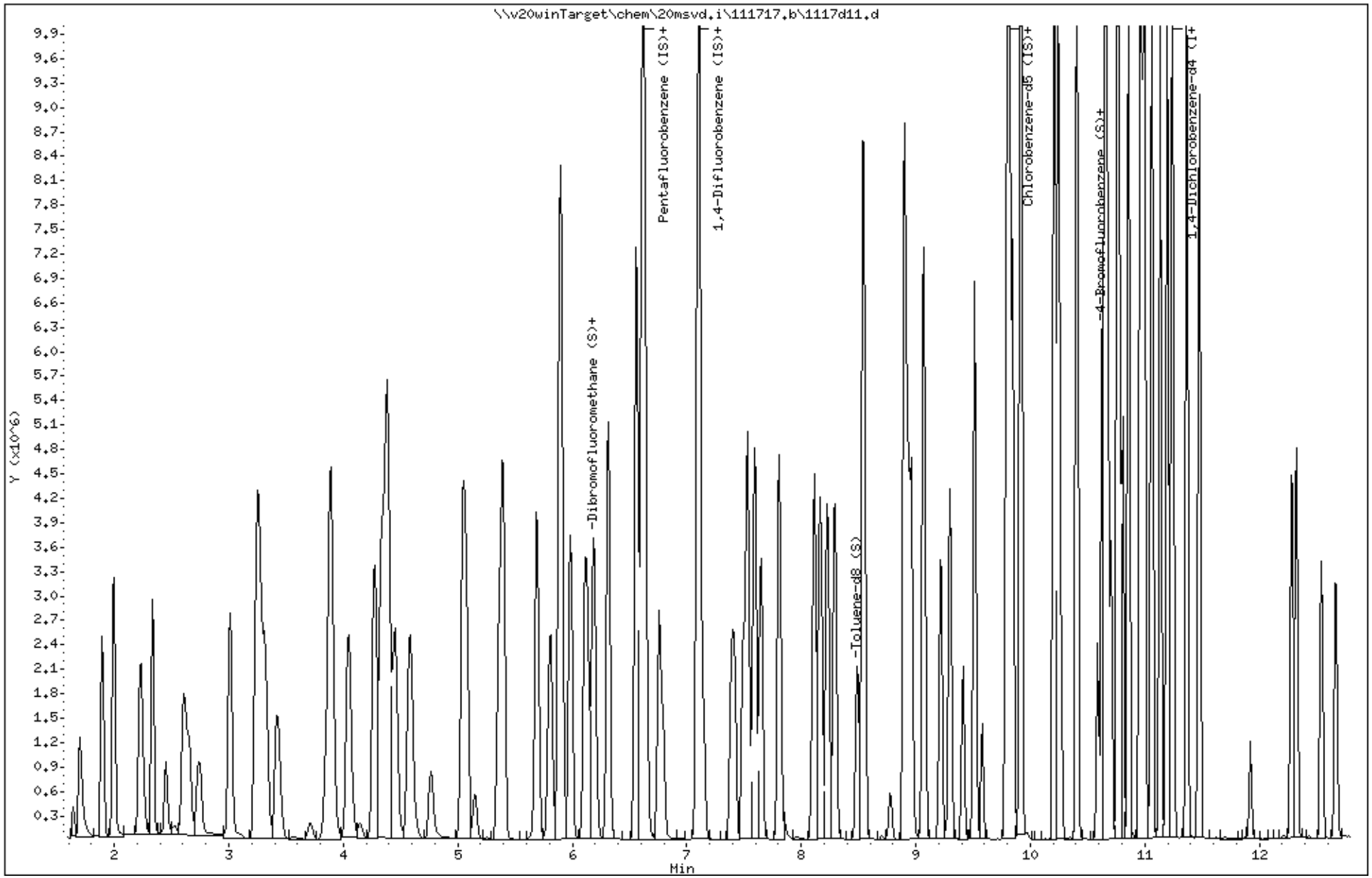
Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	5008647	200.000	210(A)
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	329575	200.000	198
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	4263530	200.000	200(A)
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	2744194	200.000	203(A)
81 Pentachloroethane	167	10.982	10.982	(0.978)	1143587	200.000	220(A)
82 1,2,4-Trimethylbenzene	105	10.998	10.998	(0.979)	4722176	200.000	205(A)
83 sec-Butylbenzene	105	11.058	11.063	(0.984)	5801643	200.000	203(A)
84 p-Isopropyltoluene	119	11.134	11.134	(0.991)	4815869	200.000	209(A)
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	2744359	200.000	210(A)
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	542087	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	2786635	200.000	209(A)
88 n-Butylbenzene	91	11.365	11.370	(1.012)	4281055	200.000	197
89 1,2-Dichlorobenzene	146	11.476	11.481	(1.022)	2352651	200.000	205(A)
90 1,2-Dibromo-3-chloropropane	157	11.922	11.927	(1.061)	342463	200.000	210(A)
91 Hexachloro-1,3-butadiene	225	12.282	12.287	(1.093)	748172	200.000	210(A)
92 1,2,4-Trichlorobenzene	180	12.322	12.327	(1.097)	1208391	200.000	215(A)
93 Naphthalene	128	12.544	12.549	(1.117)	2178172	200.000	197
94 1,2,3-Trichlorobenzene	180	12.670	12.675	(1.128)	887649	200.000	213(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d11.d
Date : 17-NOV-2017 11:16
Client ID: CAL7
Sample Info: CAL7,54403:1
Purge Volume: 5.0
Column phase: RTX VMS 30m

Instrument: 20msvd.i
Operator: GEM
Column diameter: 0.25



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717.b/1117d11.d
Injection Date: 17-NOV-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL7
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\111717ha.b\1117d11.d

Date : 17-NOV-2017 11:16

Client ID: CAL7

Instrument: 20msvd.i

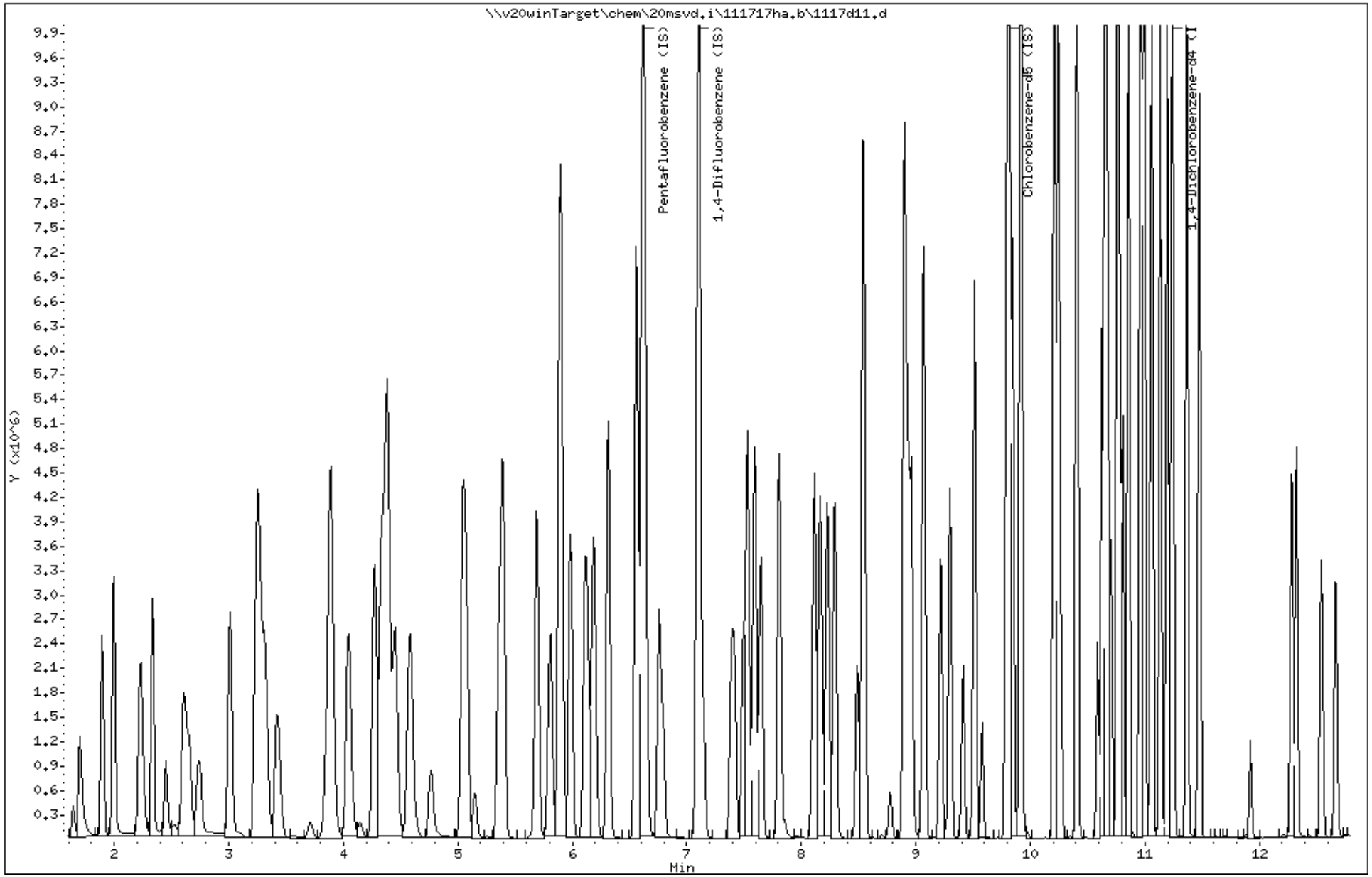
Sample Info: CAL7,54442:1

Purge Volume: 5.0

Operator: GEM

Column phase: DB-624

Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717ha.b/1117d11.d
Injection Date: 17-NOV-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL7
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d08.d
Lab Smp Id: CAL8 Client Smp ID: CAL8
Inj Date : 04-DEC-2017 10:58
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal8,54934:1
Misc Info : 7846
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\120417.b\d120417sim.m
Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 10:58 Cal File: 1204d08.d
Als bottle: 8 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

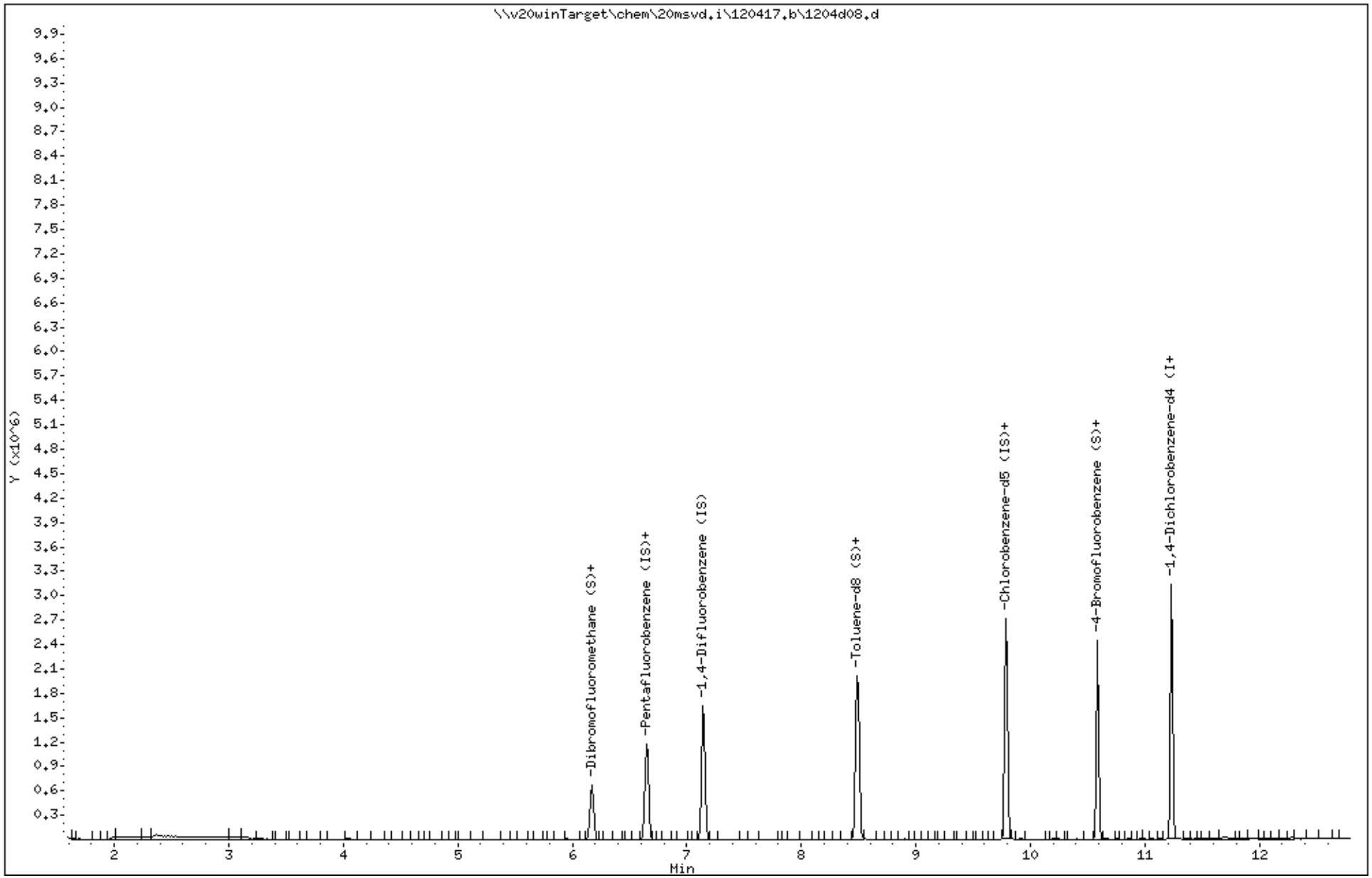
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	1.889	1.894	(0.284)	3330	0.20000	
3 Vinyl chloride	62	1.985	1.990	(0.299)	2841	0.20000	
4 Bromomethane	94	2.348	2.338	(0.353)	1407	0.20000	
5 Chloroethane	64	2.504	2.484	(0.377)	853	0.20000	
6 Trichlorofluoromethane	101	2.645	2.640	(0.398)	1489	0.20000	
7 1,1-Dichloroethene	96	3.249	3.250	(0.489)	474	0.20000	
8 Carbon disulfide	76	3.270	3.275	(0.492)	4164	0.20000	
9 1,1,2-Trichlorotrifluoroethane	101	3.315	3.325	(0.499)	191	0.20000	
10 Iodomethane	142	3.416	3.431	(0.514)	1271	0.20000	
11 Acrolein	56	Compound Not Detected.					
12 Allyl chloride	41	3.904	3.894	(0.587)	1859	0.20000	
13 Methylene Chloride	84	4.050	4.046	(0.609)	1212	0.20000	
14 Acetone	43	4.151	4.151	(0.624)	309	0.20000	
15 trans-1,2-Dichloroethene	96	4.272	4.277	(0.642)	256	0.20000	
16 Methyl Acetate	74	4.338	4.323	(0.652)	211	0.20000	
17 n-Hexane	57	4.388	4.393	(0.660)	1784	0.20000	
18 Methyl-tert-butyl ether	73	4.448	4.449	(0.669)	533	0.20000	
19 Acetonitrile	41	4.756	4.766	(0.715)	766	0.20000	
20 Chloroprene	53	5.053	5.048	(0.760)	1889	0.20000	
21 1,1-Dichloroethane	63	Compound Not Detected.					
22 Acrylonitrile	53	5.159	5.154	(0.776)	80	0.20000	

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.385	5.396	(0.810)	1117	0.20000	
	24 cis-1,2-Dichloroethene	96	5.698	5.688	(0.857)	1119	0.20000	
	25 2,2-Dichloropropane	77	5.799	5.809	(0.872)	465	0.20000	
	26 Cyclohexane	84	5.889	5.899	(0.886)	802	0.20000	
	27 Bromochloromethane	128	Compound Not Detected.					
	28 Chloroform	83	5.980	5.985	(0.899)	2248	0.20000	
	29 Carbon tetrachloride	117	6.126	6.116	(0.858)	364	0.20000	
	30 Tetrahydrofuran	42	Compound Not Detected.					
	31 1,1,1-Trichloroethane	97	6.192	6.192	(0.931)	1296	0.20000	
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	392420	50.0000	50.0
	33 1,1-Dichloropropene	75	6.307	6.312	(0.883)	1222	0.20000	
	34 2-Butanone (MEK)	43	Compound Not Detected.					
	35 Benzene	78	6.554	6.559	(0.917)	3681	0.20000	
	36 Propionitrile	54	6.595	6.600	(0.992)	521	0.20000	
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	6531	0.20000	
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	349265	50.0000	
	39 1,2-Dichloroethane	62	6.761	6.756	(0.946)	1462	0.20000	
	40 Isobutanol	43	6.791	6.791	(1.021)	409	0.20000	
	41 Methylcyclohexane	83	7.088	7.093	(0.992)	453	0.20000	
	42 Trichloroethene	130	7.108	7.108	(0.995)	1414	0.20000	
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1163955	50.0000	
	44 Dibromomethane	93	7.496	7.496	(1.049)	317	0.20000	
	45 1,2-Dichloropropane	63	7.602	7.592	(1.064)	1224	0.20000	
	46 Bromodichloromethane	83	7.652	7.647	(1.071)	945	0.20000	
	47 Methyl methacrylate	41	Compound Not Detected.					
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.					
	49 2-Chloroethyl vinyl ether	63	8.222	8.222	(1.151)	316	0.20000	
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	1362	0.20000	
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1313030	50.0000	50.0
	52 Toluene	91	8.544	8.539	(1.196)	3906	0.20000	
	53 Tetrachloroethene	164	8.897	8.902	(0.909)	906	0.20000	
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	56 Ethyl methacrylate	69	9.068	9.063	(1.269)	1232	0.20000	
	57 1,1,2-Trichloroethane	97	9.078	9.068	(1.271)	175	0.20000	
	58 Dibromochloromethane	129	Compound Not Detected.					
	59 1,3-Dichloropropane	76	9.305	9.300	(0.951)	226	0.20000	
	60 1,2-Dibromoethane (EDB)	107	9.416	9.411	(1.318)	610	0.20000	
	61 2-Hexanone	43	9.577	9.577	(0.978)	265	0.20000	
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	529018	50.0000	
	63 Chlorobenzene	112	9.793	9.799	(1.000)	3362	0.20000	
	64 Ethylbenzene	91	9.814	9.814	(1.003)	4639	0.20000	
	65 1,1,1,2-Tetrachloroethane	131	9.834	9.844	(1.005)	259	0.20000	
	66 m&p-Xylene	106	9.914	9.914	(1.013)	3386	0.20000	
	67 o-Xylene	106	10.207	10.207	(1.043)	1622	0.20000	
	68 Styrene	104	10.237	10.242	(1.046)	2593	0.20000	
	69 Bromoform	173	Compound Not Detected.					
	70 Isopropylbenzene (Cumene)	105	10.408	10.403	(0.926)	4485	0.20000	
$	71 4-Bromofluorobenzene (S)	176	10.584	10.589	(0.942)	537626	50.0000	50.0
	72 trans-1,4-Dichloro-2-butene	88	10.630	10.625	(0.946)	140	0.20000	
	73 Bromobenzene	156	10.655	10.655	(0.948)	1944	0.20000	
	74 n-Propylbenzene	91	10.655	10.660	(0.948)	4673	0.20000	
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	972	0.20000	
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	3043	0.20000	

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	3167	0.20000	
78 1,2,3-Trichloropropane	110	10.584	10.791	(0.942)	682	0.20000	
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	2641	0.20000	
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	2047	0.20000	
81 Pentachloroethane	167	10.977	10.982	(0.977)	305	0.20000	
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	3196	0.20000	
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	4123	0.20000	
84 p-Isopropyltoluene	119	11.139	11.134	(0.991)	3679	0.20000	
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	2010	0.20000	
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	543980	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	2485	0.20000	
88 n-Butylbenzene	91	11.360	11.365	(1.011)	4048	0.20000	
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	1794	0.20000	
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	260	0.20000	0.200
91 Hexachloro-1,3-butadiene	225	12.282	12.282	(1.093)	3865	0.20000	
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	1290	0.20000	
93 Naphthalene	128	12.539	12.544	(1.116)	2727	0.20000	
94 1,2,3-Trichlorobenzene	180	12.665	12.670	(1.127)	1381	0.20000	

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d08.d
Date : 04-DEC-2017 10:58
Client ID: CAL8
Instrument: 20msvd.i
Sample Info: CAL8,54934:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\120417.b/1204d08.d
Injection Date: 04-DEC-2017 10:58
Instrument: 20msvd.i
Lab Sample ID: CAL8
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d09.d
Lab Smp Id: CAL1 Client Smp ID: CAL1
Inj Date : 04-DEC-2017 11:16
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal1,54927:1
Misc Info : 7846
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\120417.b\d120417sim.m
Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 11:16 Cal File: 1204d09.d
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.713	1.703	(0.258)	3624	0.50000	0.464(M)
2 Chloromethane	50	1.899	1.894	(0.286)	7265	0.50000	0.552
3 Vinyl chloride	62	1.985	1.990	(0.299)	6770	0.50000	0.543
4 Bromomethane	94	2.348	2.338	(0.353)	3944	0.50000	1.81
5 Chloroethane	64	2.499	2.484	(0.376)	3363	0.50000	0.602(MH)
6 Trichlorofluoromethane	101	2.640	2.640	(0.397)	5200	0.50000	0.516
7 1,1-Dichloroethene	96	3.260	3.250	(0.491)	2276	0.50000	1.13(M)
8 Carbon disulfide	76	3.275	3.275	(0.493)	8629	0.50000	0.452
9 1,1,2-Trichlorotrifluoroethane	101	3.335	3.325	(0.502)	2737	0.50000	0.415(M)
10 Iodomethane	142	3.426	3.431	(0.516)	4431	0.50000	0.358(M)
11 Acrolein	56	3.733	3.713	(0.562)	744	0.50000	0.597(M)
12 Allyl chloride	41	3.899	3.894	(0.587)	7518	0.50000	0.557(M)
13 Methylene Chloride	84	4.061	4.046	(0.611)	7936	0.50000	1.63(M)
14 Acetone	43	4.156	4.151	(0.626)	2011	0.50000	(M)
15 trans-1,2-Dichloroethene	96	4.272	4.277	(0.643)	3187	0.50000	0.501(M)
16 Methyl Acetate	74	4.318	4.323	(0.650)	368	0.50000	2.04
17 n-Hexane	57	4.383	4.393	(0.660)	5735	0.50000	0.426(M)
18 Methyl-tert-butyl ether	73	4.464	4.449	(0.672)	5347	0.50000	0.432
19 Acetonitrile	41	4.761	4.766	(0.716)	3706	5.00000	4.57(M)
20 Chloroprene	53	5.053	5.048	(0.760)	4172	0.50000	0.306(M)
21 1,1-Dichloroethane	63	5.068	5.073	(0.763)	6718	0.50000	0.453(M)
22 Acrylonitrile	53	5.144	5.154	(0.774)	1059	0.50000	0.417

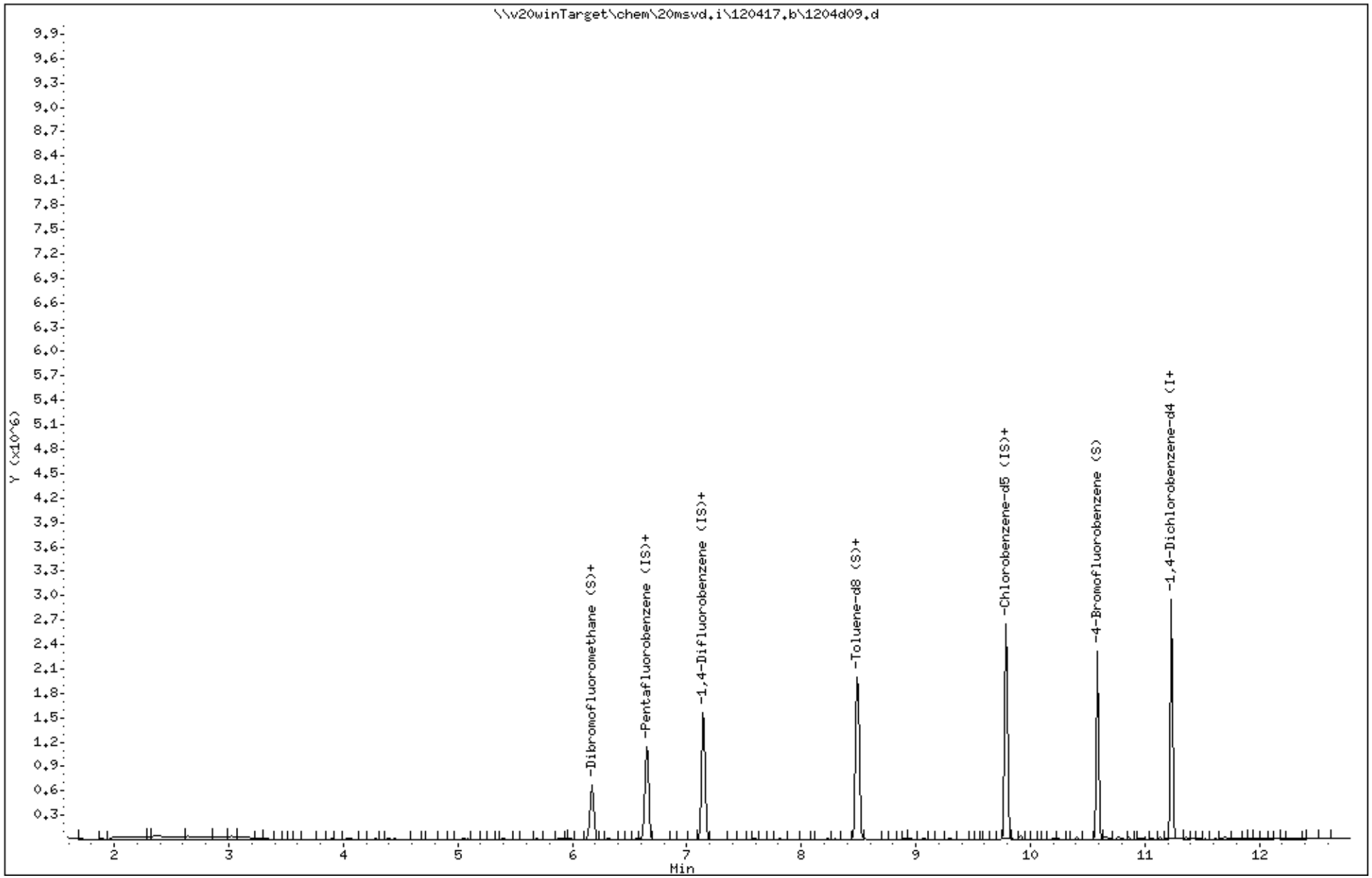
	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.396	5.396	(0.812)	17794	0.50000	0.527
	24 cis-1,2-Dichloroethene	96	5.698	5.688	(0.857)	3268	0.50000	0.449
	25 2,2-Dichloropropane	77	5.809	5.809	(0.874)	3547	0.50000	0.463
	26 Cyclohexane	84	5.894	5.899	(0.887)	3423	0.50000	0.395(M)
	27 Bromochloromethane	128	5.894	5.899	(0.887)	1383	0.50000	0.401(M)
	28 Chloroform	83	5.985	5.985	(0.901)	4485	0.50000	0.408
	29 Carbon tetrachloride	117	6.111	6.116	(0.855)	3419	0.50000	0.386
	30 Tetrahydrofuran	42	6.146	6.156	(0.925)	1336	0.50000	0.548(M)
	31 1,1,1-Trichloroethane	97	6.182	6.192	(0.930)	4376	0.50000	0.449(M)
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.929)	383757	50.0000	51.4
	33 1,1-Dichloropropene	75	6.318	6.312	(0.884)	4400	0.50000	0.486
	34 2-Butanone (MEK)	43	6.318	6.312	(0.951)	2368	0.50000	0.765(M)
	35 Benzene	78	6.564	6.559	(0.919)	10413	0.50000	0.411
	36 Propionitrile	54	6.600	6.600	(0.993)	4023	5.00000	4.52
	37 Methacrylonitrile	41	6.620	6.620	(0.996)	16127	5.00000	3.87
*	38 Pentafluorobenzene (IS)	99	6.645	6.650	(1.000)	339817	50.0000	
	39 1,2-Dichloroethane	62	6.761	6.756	(0.946)	4433	0.50000	0.471
	40 Isobutanol	43	6.791	6.791	(1.022)	2070	10.5000	8.39
	41 Methylcyclohexane	83	7.093	7.093	(0.993)	3409	0.50000	0.356
	42 Trichloroethene	130	7.103	7.108	(0.994)	3158	0.50000	0.412(M)
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1118497	50.0000	
	44 Dibromomethane	93	7.496	7.496	(1.049)	1962	0.50000	0.496(M)
	45 1,2-Dichloropropane	63	7.597	7.592	(1.063)	3593	0.50000	0.416(M)
	46 Bromodichloromethane	83	7.642	7.647	(1.070)	3242	0.50000	0.399
	47 Methyl methacrylate	41	7.809	7.804	(1.093)	4276	1.00000	0.676
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.849	(1.099)	367	10.0000	9.36(M)
	49 2-Chloroethyl vinyl ether	63	8.232	8.222	(1.152)	4049	1.00000	0.931
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	3632	0.50000	0.388
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1259174	50.0000	50.2
	52 Toluene	91	8.544	8.539	(1.196)	9758	0.50000	0.368
	53 Tetrachloroethene	164	8.907	8.902	(0.910)	2766	0.50000	0.400
	54 4-Methyl-2-Pentanone	43	8.907	8.902	(0.910)	3074	0.50000	0.475(M)
	55 trans-1,3-Dichloropropene	75	8.927	8.932	(1.250)	2830	0.50000	0.360(M)
	56 Ethyl methacrylate	69	9.068	9.063	(1.269)	1431	0.50000	0.273(M)
	57 1,1,2-Trichloroethane	97	9.073	9.068	(1.270)	2225	0.50000	0.454
	58 Dibromochloromethane	129	9.209	9.214	(0.941)	2010	0.50000	2.22(M)
	59 1,3-Dichloropropane	76	9.305	9.300	(0.951)	3015	0.50000	0.374
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	2146	0.50000	0.415
	61 2-Hexanone	43	9.572	9.577	(0.978)	2405	0.50000	0.527(M)
*	62 Chlorobenzene-d5 (IS)	82	9.789	9.788	(1.000)	519914	50.0000	
	63 Chlorobenzene	112	9.799	9.799	(1.001)	7151	0.50000	0.394
	64 Ethylbenzene	91	9.814	9.814	(1.003)	13803	0.50000	0.450
	65 1,1,1,2-Tetrachloroethane	131	9.839	9.844	(1.005)	2658	0.50000	0.404
	66 m&p-Xylene	106	9.909	9.914	(1.012)	7293	1.00000	0.616
	67 o-Xylene	106	10.207	10.207	(1.043)	3927	0.50000	0.359
	68 Styrene	104	10.242	10.242	(1.046)	7668	0.50000	0.430
	69 Bromoform	173	10.262	10.267	(1.048)	1078	0.50000	2.40
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	9674	0.50000	0.357
$	71 4-Bromofluorobenzene (S)	176	10.584	10.589	(0.942)	512953	50.0000	50.7
	72 trans-1,4-Dichloro-2-butene	88	10.620	10.625	(0.945)	890	1.00000	8.09
	73 Bromobenzene	156	10.655	10.655	(0.948)	3186	0.50000	0.414
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	10995	0.50000	0.349
	75 1,1,2,2-Tetrachloroethane	83	10.705	10.700	(0.953)	1758	0.50000	0.655
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	7885	0.50000	0.414

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	6926	0.50000	0.349
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	559	0.50000	0.377
79 4-Chlorotoluene	91	10.857	10.856	(0.966)	6489	0.50000	0.372
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	3729	0.50000	0.347
81 Pentachloroethane	167	10.982	10.982	(0.978)	1602	0.50000	0.354
82 1,2,4-Trimethylbenzene	105	10.998	10.998	(0.979)	7571	0.50000	0.388
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	9320	0.50000	0.372
84 p-Isopropyltoluene	119	11.134	11.134	(0.991)	6895	0.50000	0.342
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	5723	0.50000	0.468
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	510500	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.244	(1.000)	5885	0.50000	0.475
88 n-Butylbenzene	91	11.365	11.365	(1.012)	7261	0.50000	0.405
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	4232	0.50000	0.397
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	572	0.50000	2.14
91 Hexachloro-1,3-butadiene	225	12.287	12.282	(1.094)	1928	0.50000	0.597
92 1,2,4-Trichlorobenzene	180	12.328	12.322	(1.097)	2008	0.50000	2.88
93 Naphthalene	128	12.539	12.544	(1.116)	4557	0.50000	0.494
94 1,2,3-Trichlorobenzene	180	12.665	12.670	(1.127)	1865	0.50000	0.485

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d09.d
Date : 04-DEC-2017 11:16
Client ID: CAL1
Instrument: 20msvd.i
Sample Info: CAL1,54927:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



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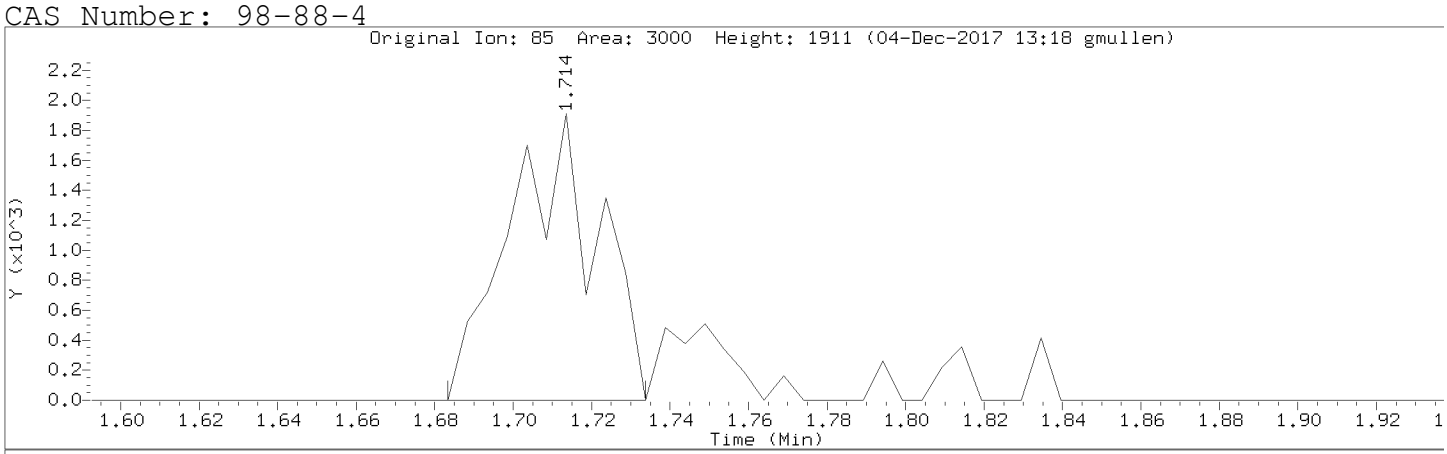
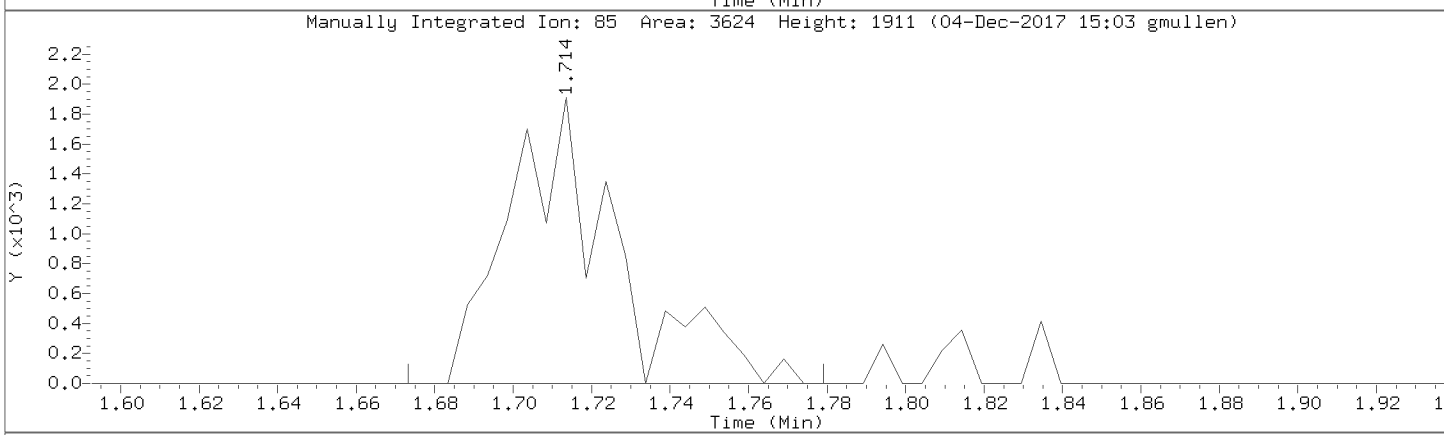
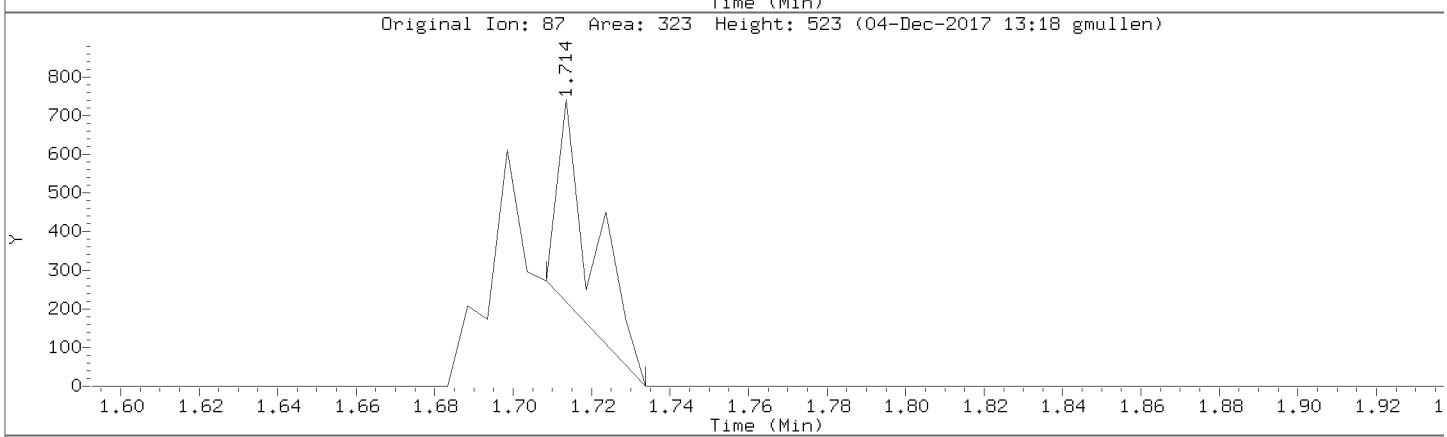
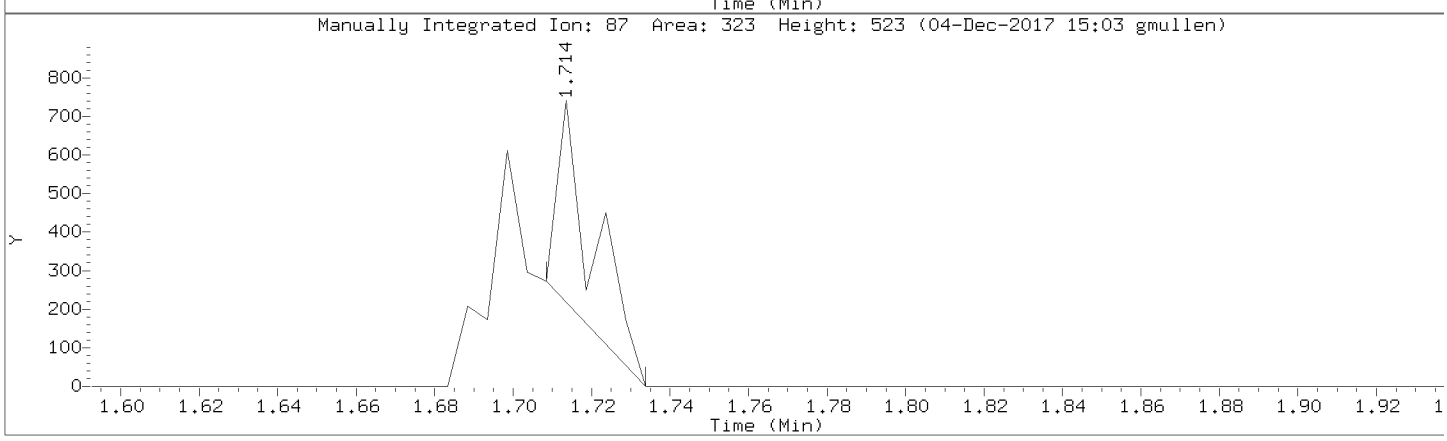
Data File: \\v20winTarget\chem\20msvd.i\120417.b/1204d09.d
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Dichlorodifluoromethane Review Code: LT
CAS Number: 98-88-4









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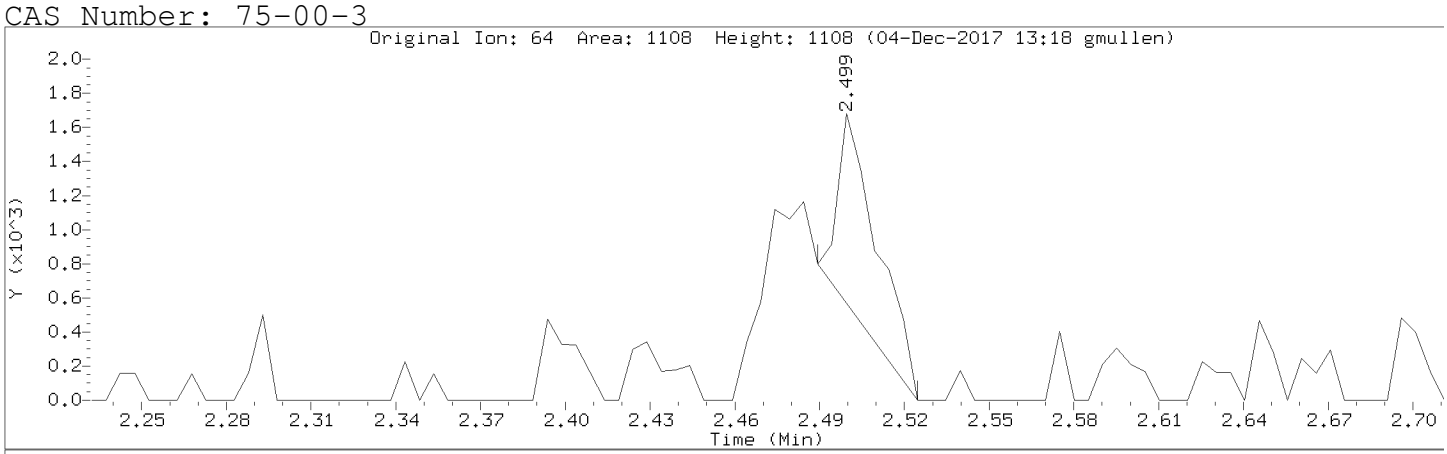
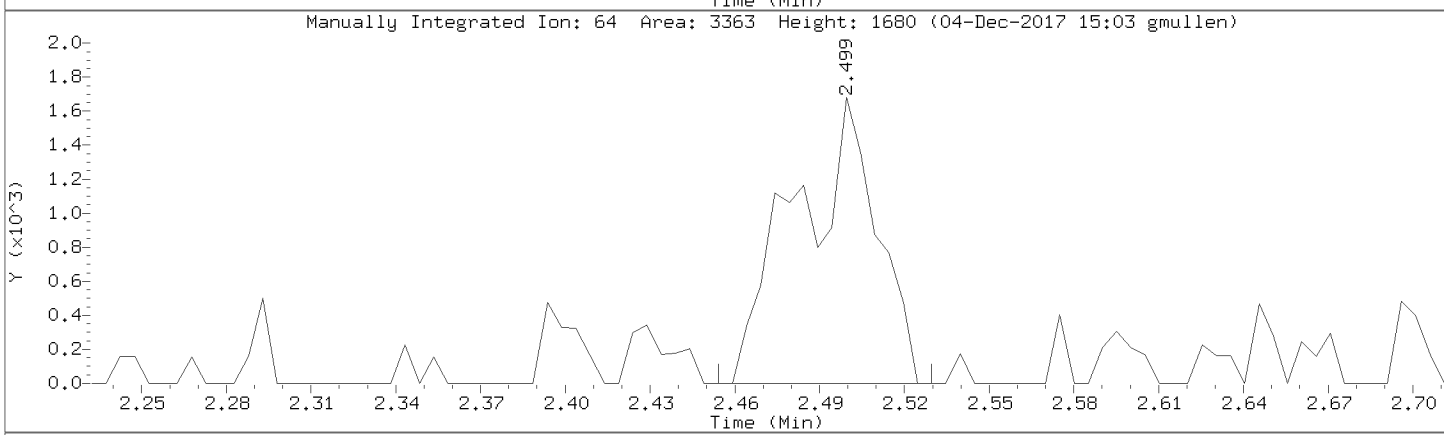
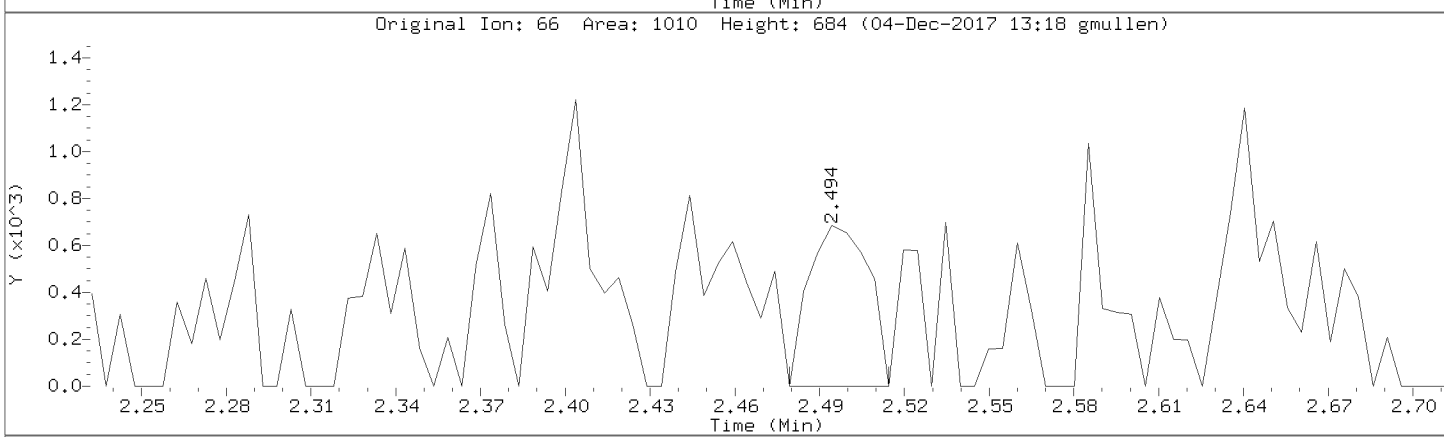
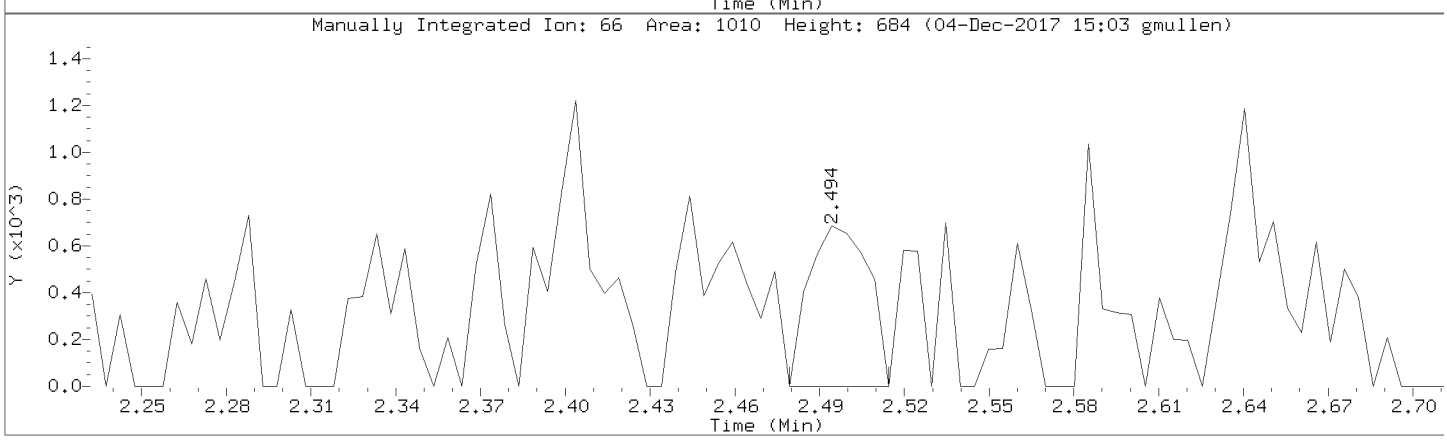
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Chloroethane Review Code: LT
CAS Number: 75-00-3









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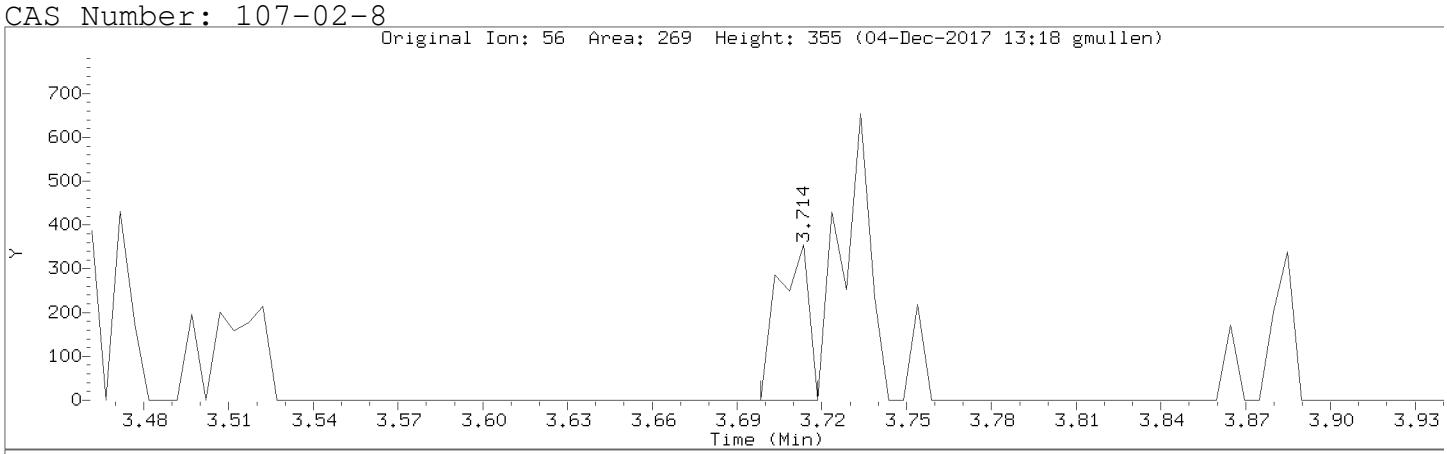
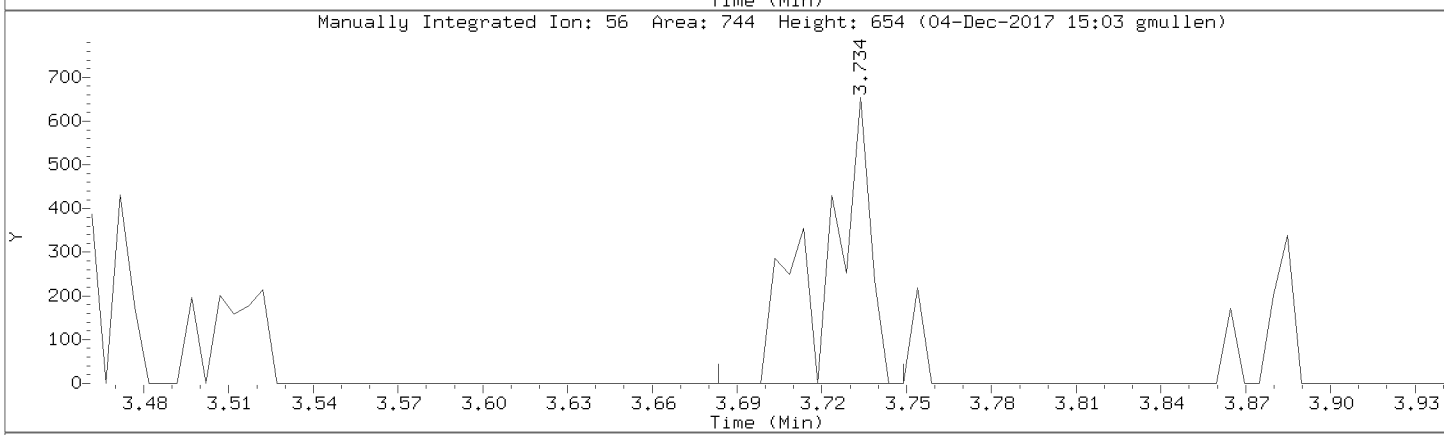
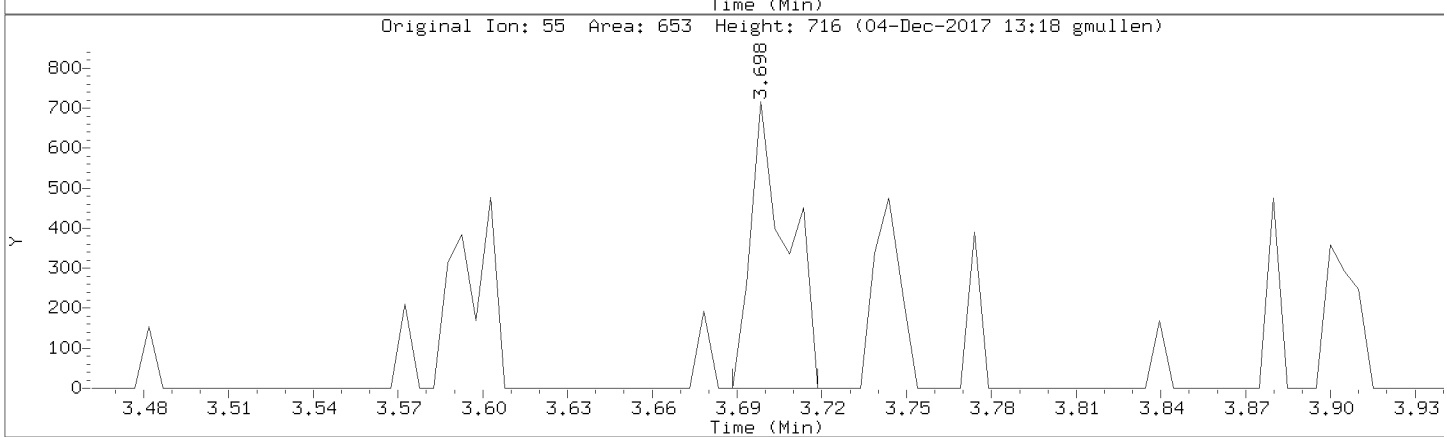
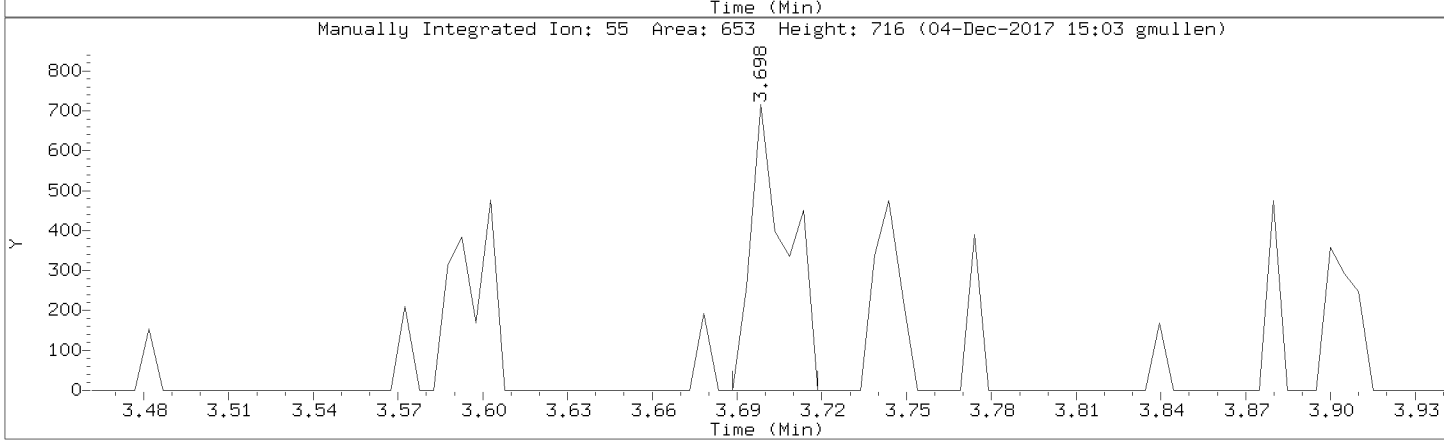
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Acrolein Review Code: LT
CAS Number: 107-02-8









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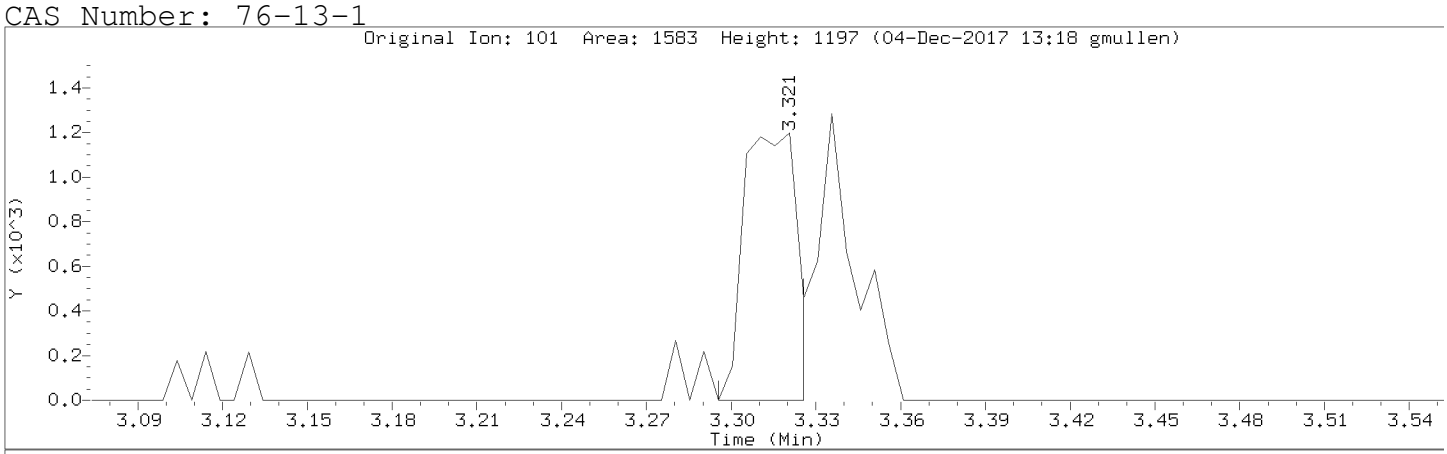
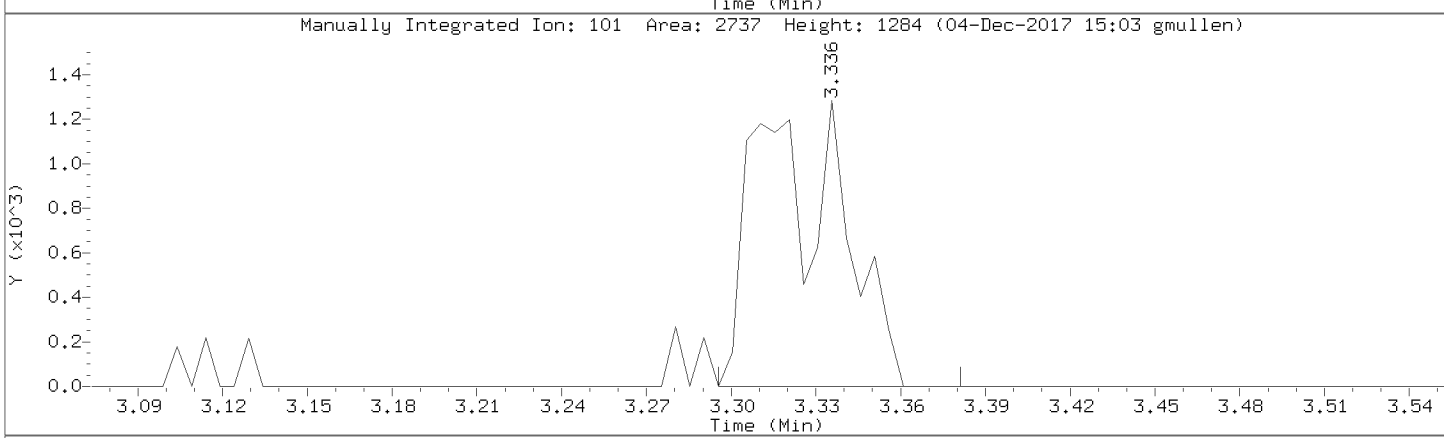
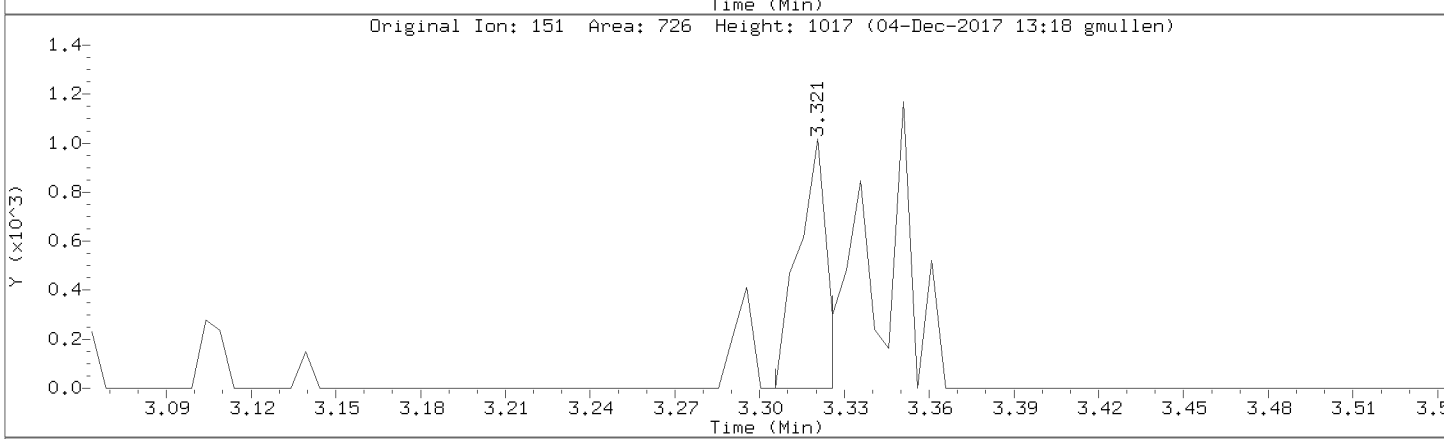
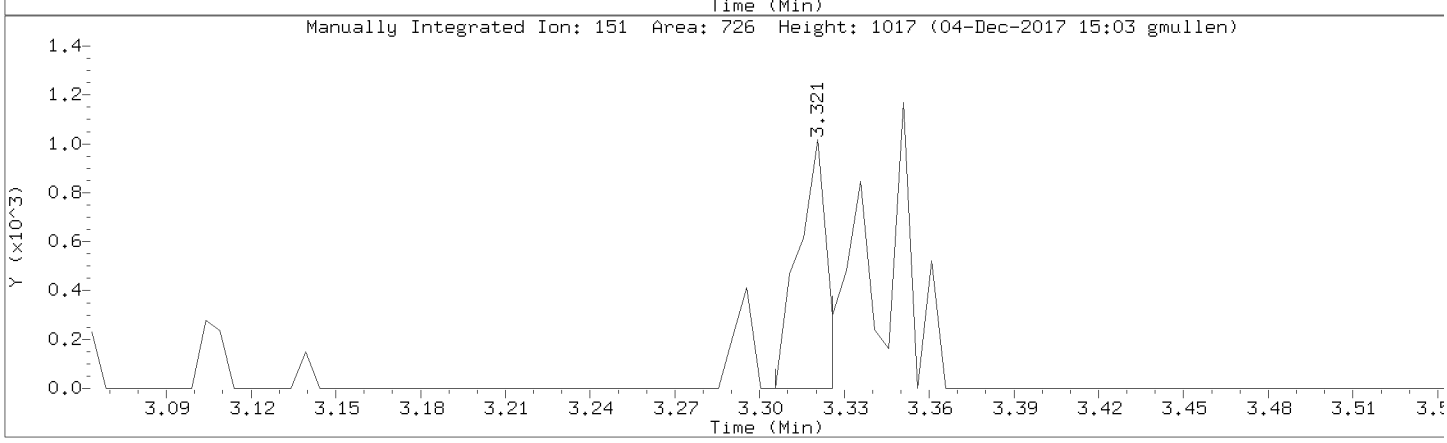
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,1,2-Trichlorotrifluoroethane Review Code: LT
CAS Number: 76-13-1









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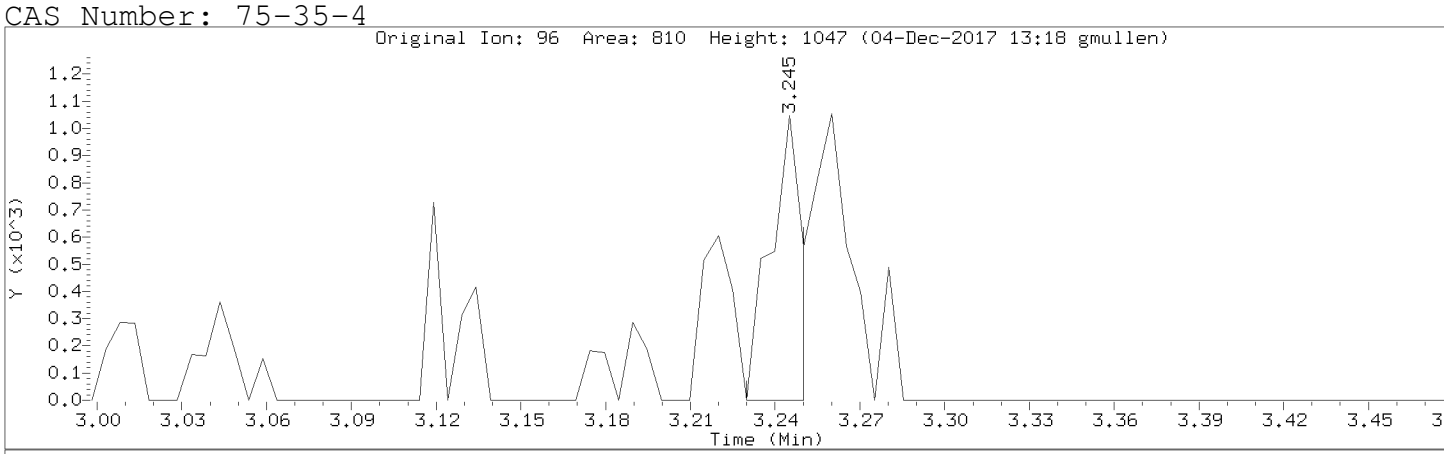
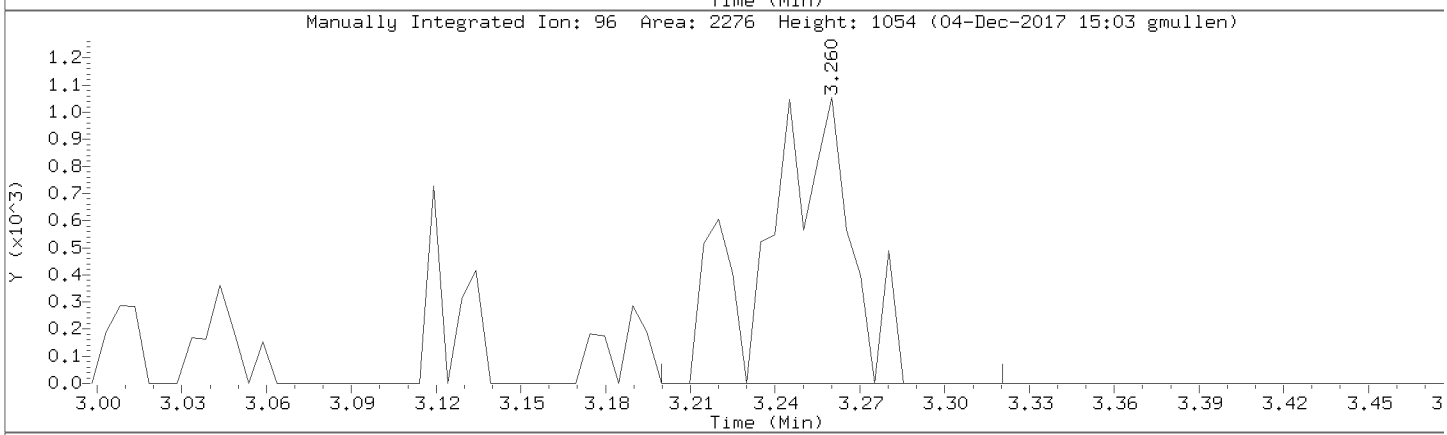
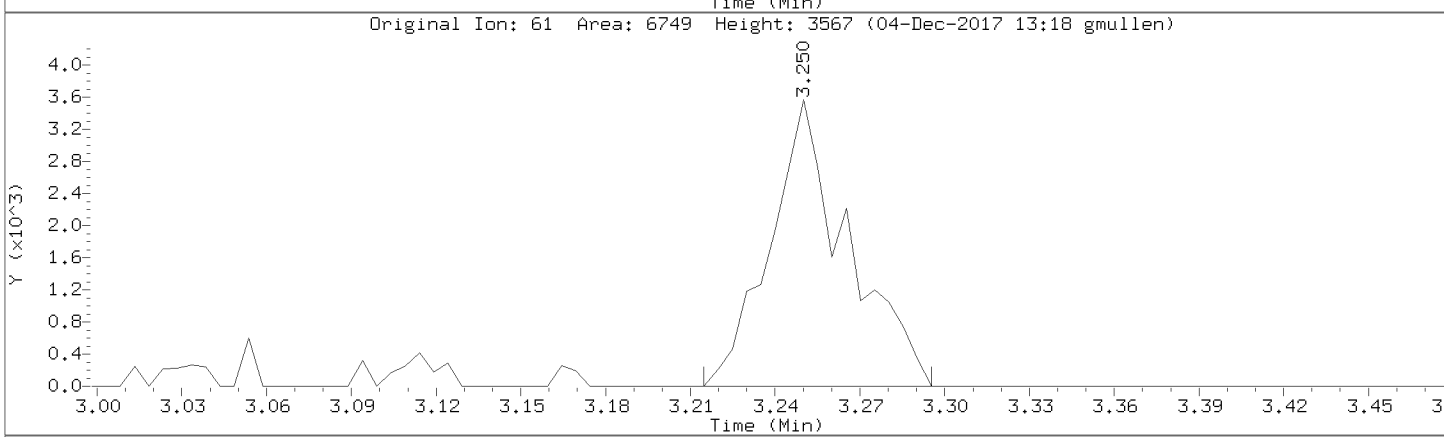
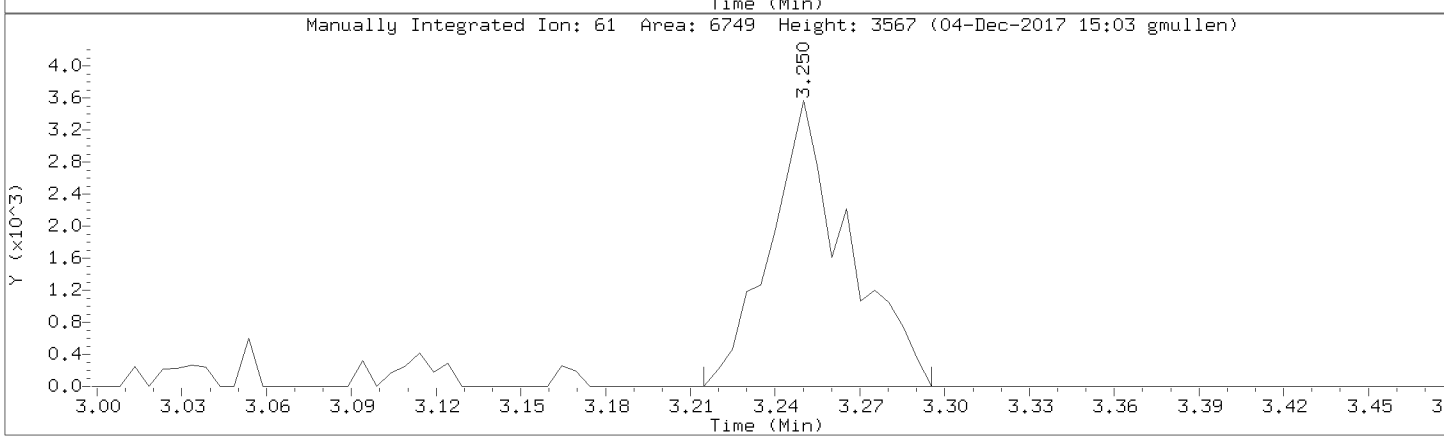
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,1-Dichloroethene Review Code: LT
CAS Number: 75-35-4









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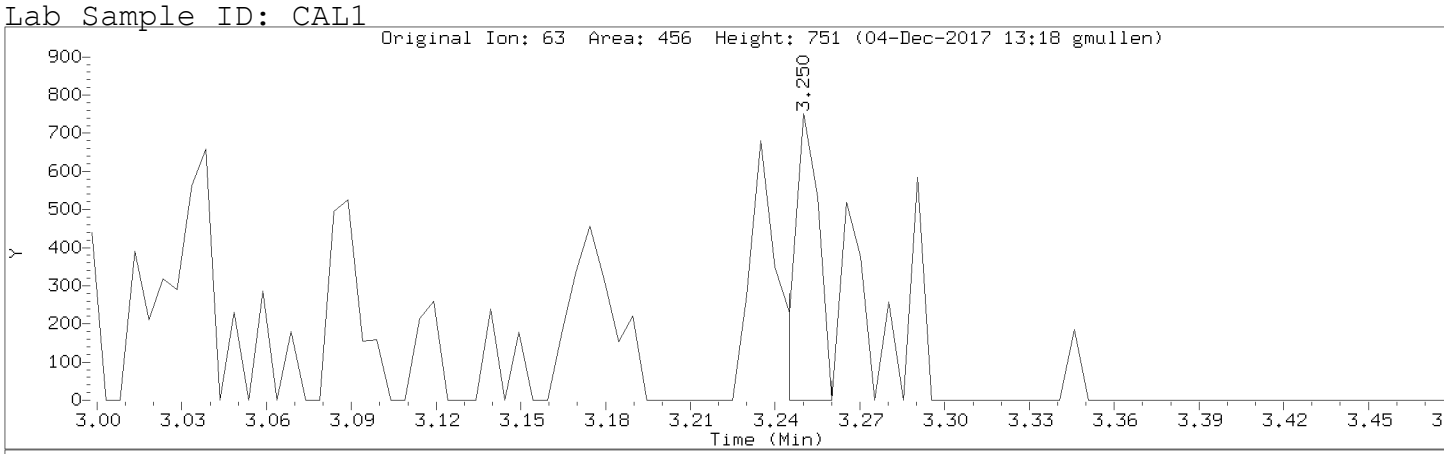
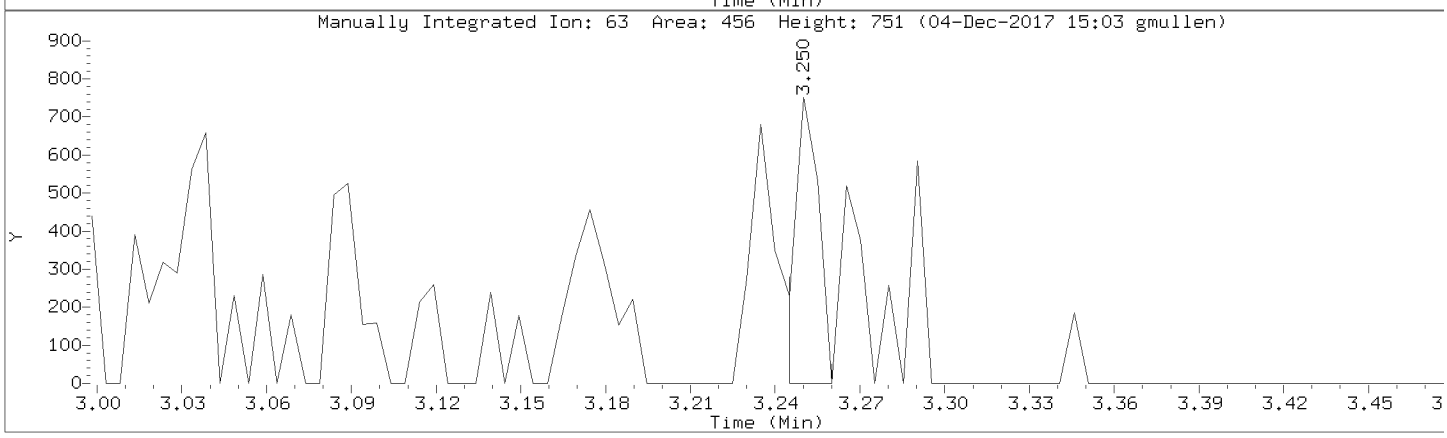
Lab Sample ID: CAL1





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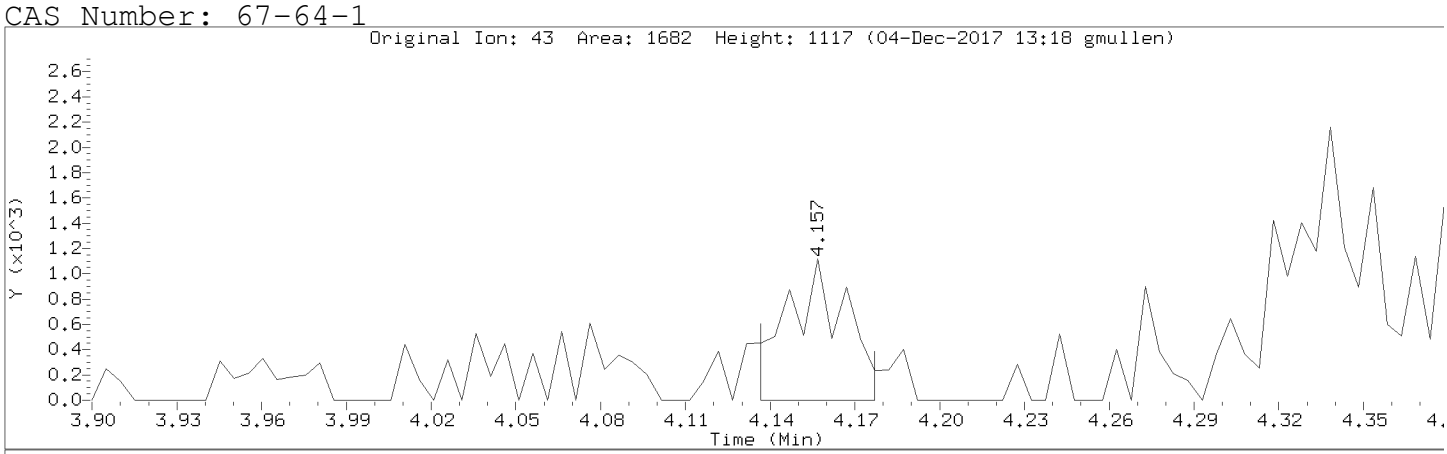
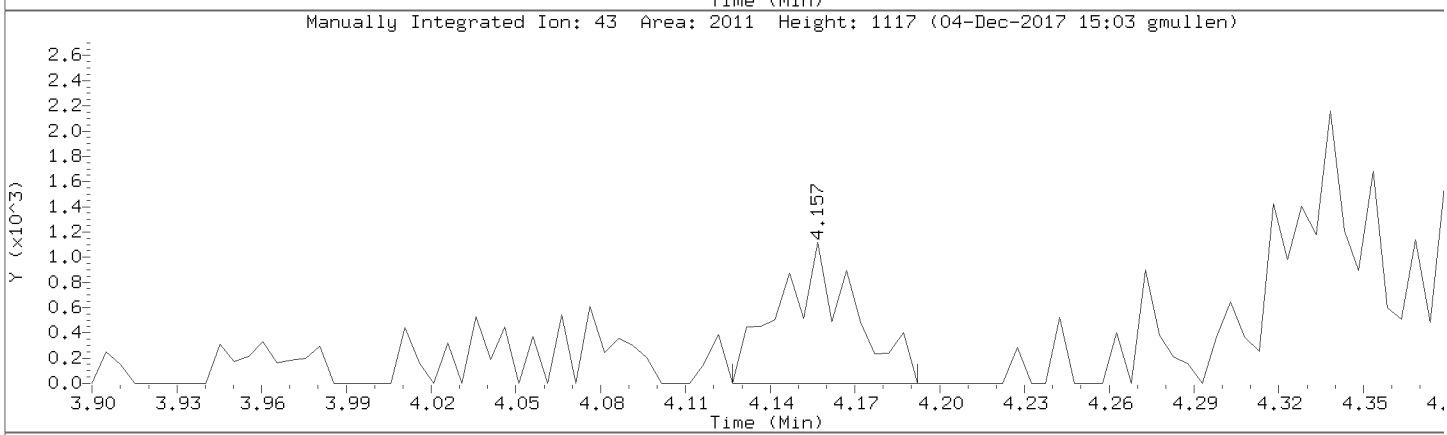
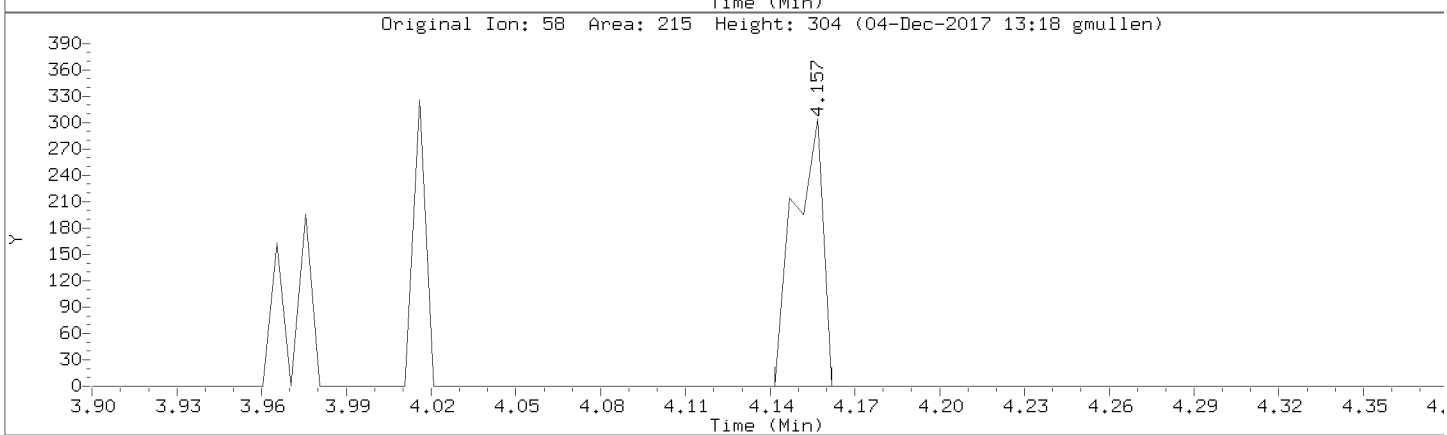
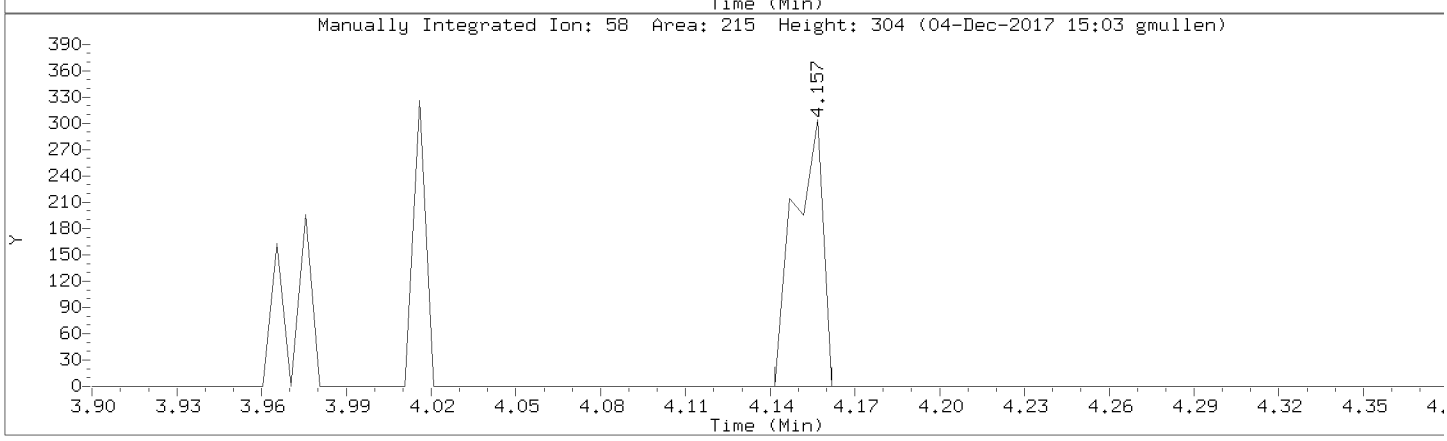
Lab Sample ID: CAL1

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









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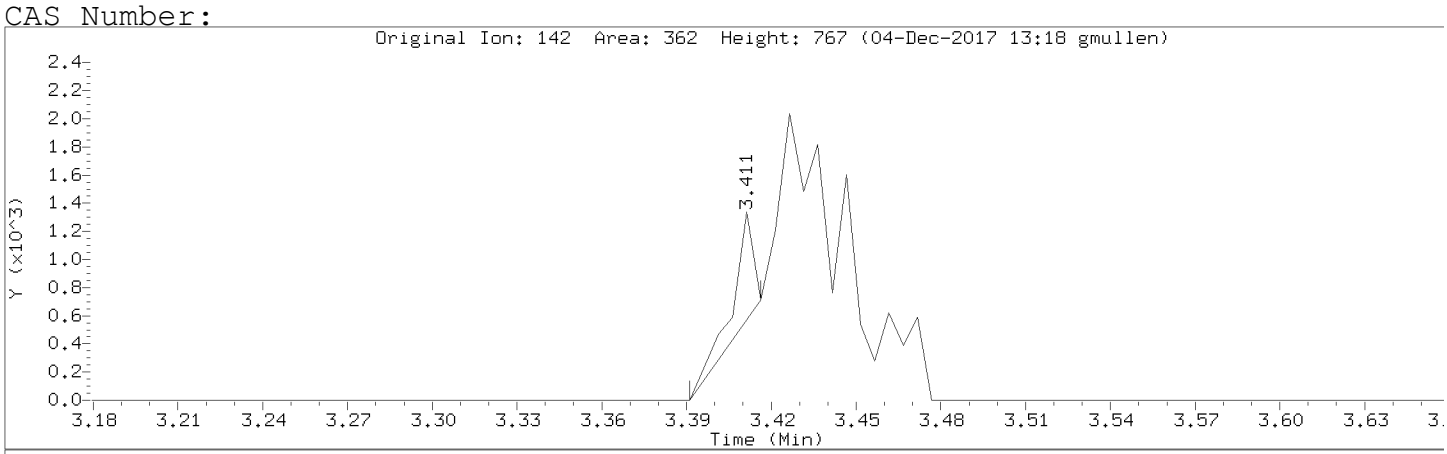
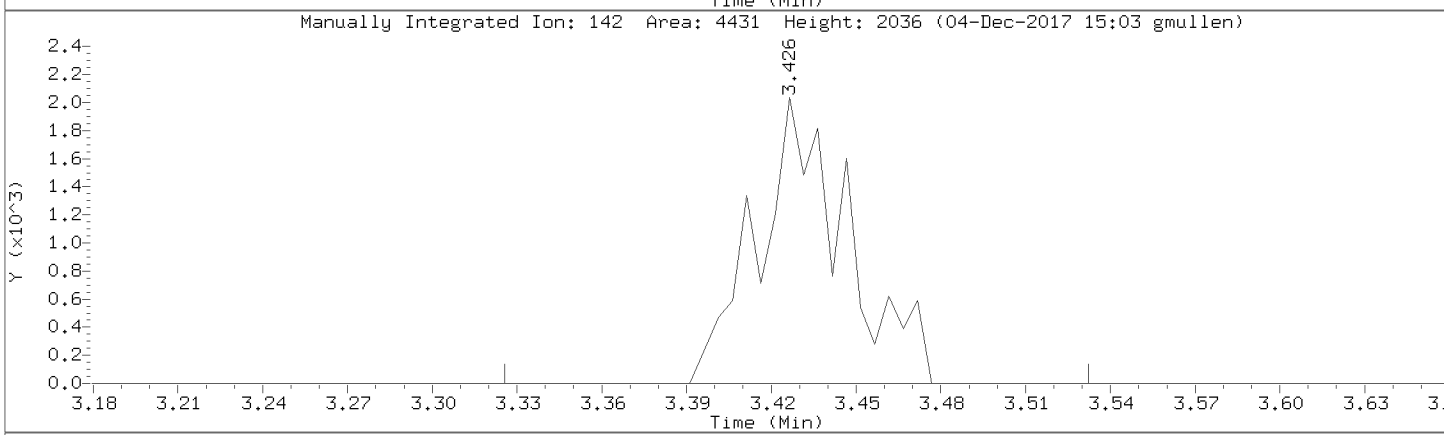
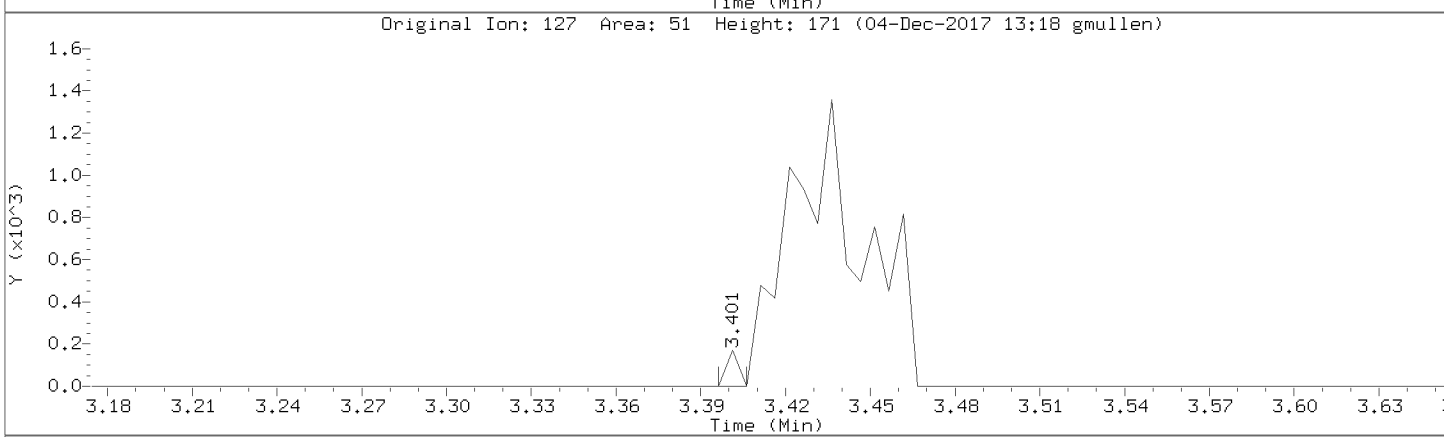
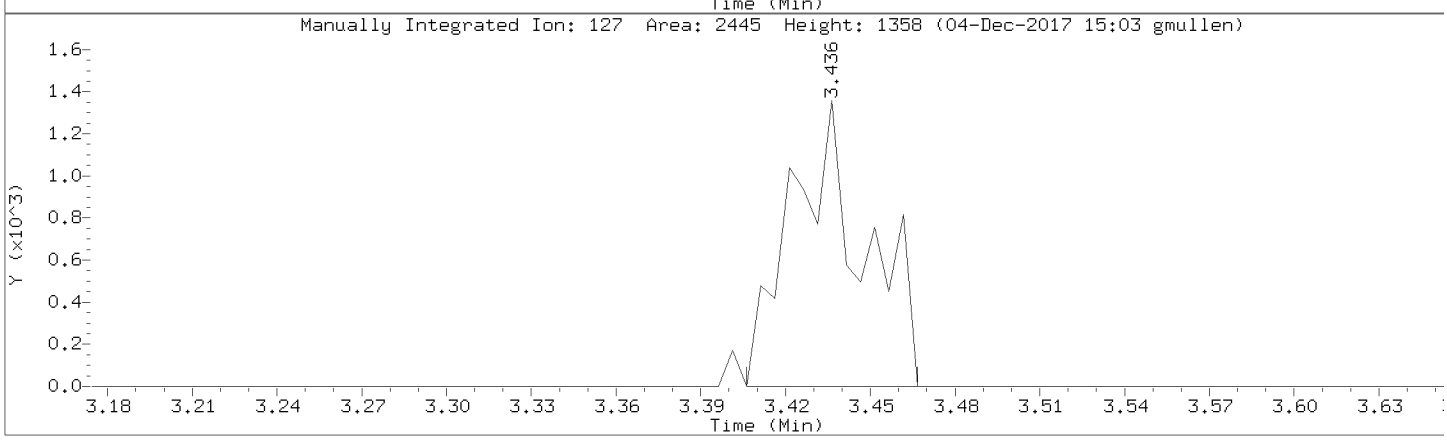
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Iodomethane Review Code: LT
CAS Number:









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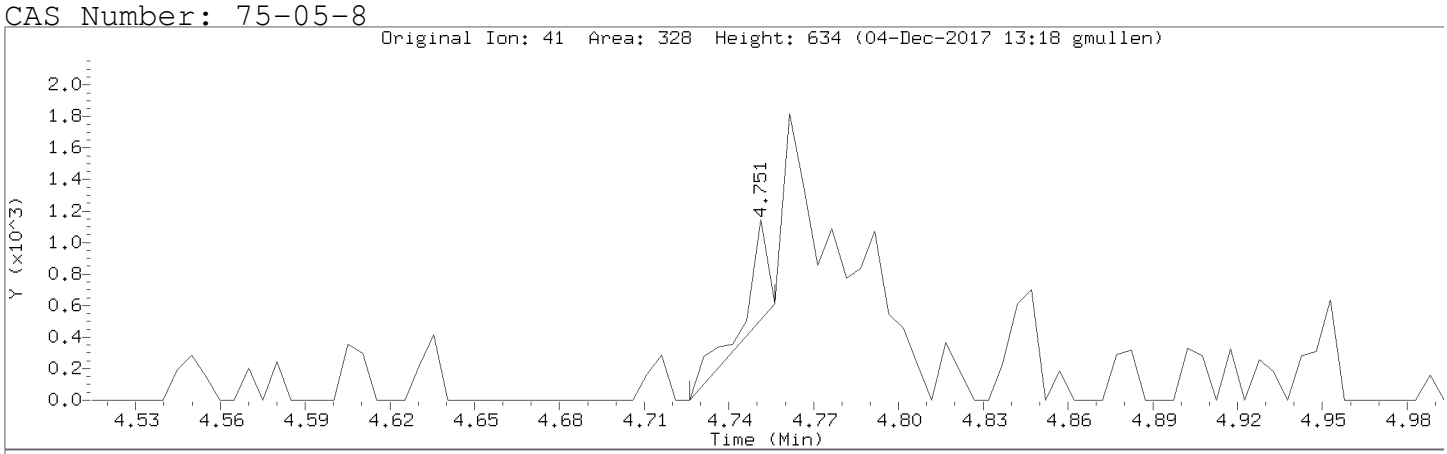
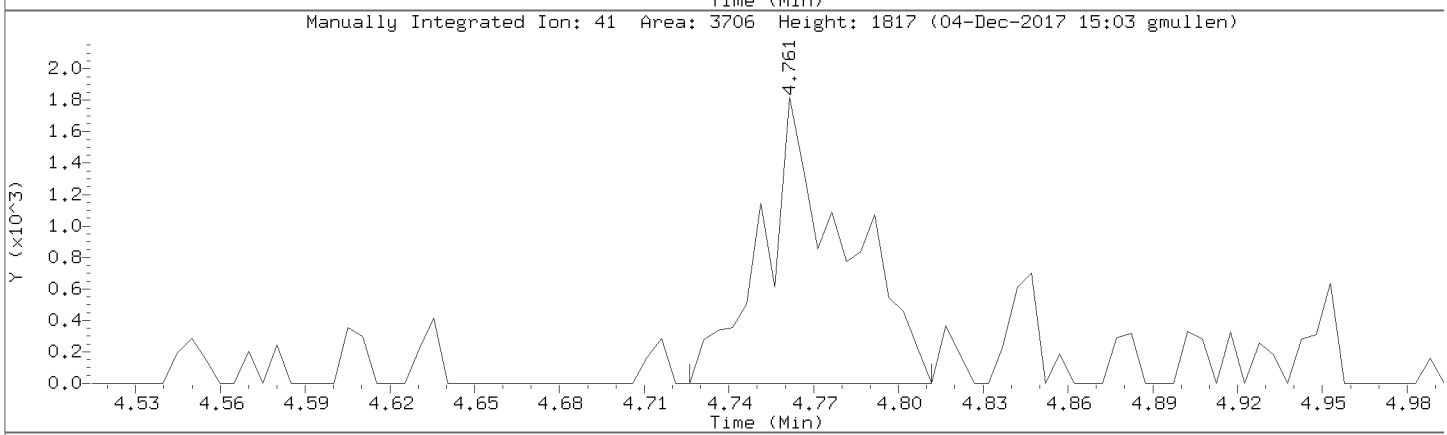
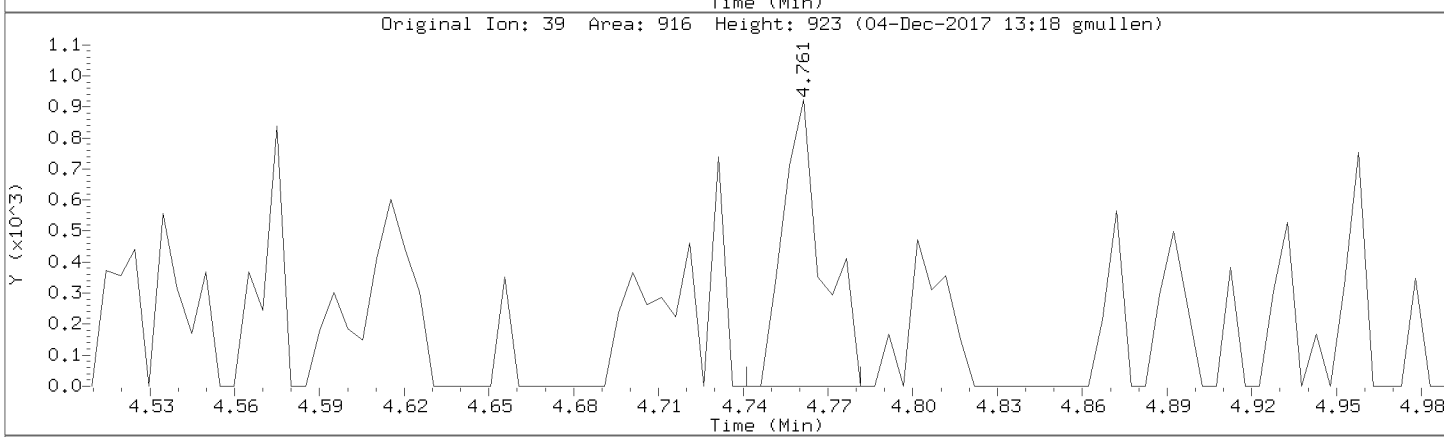
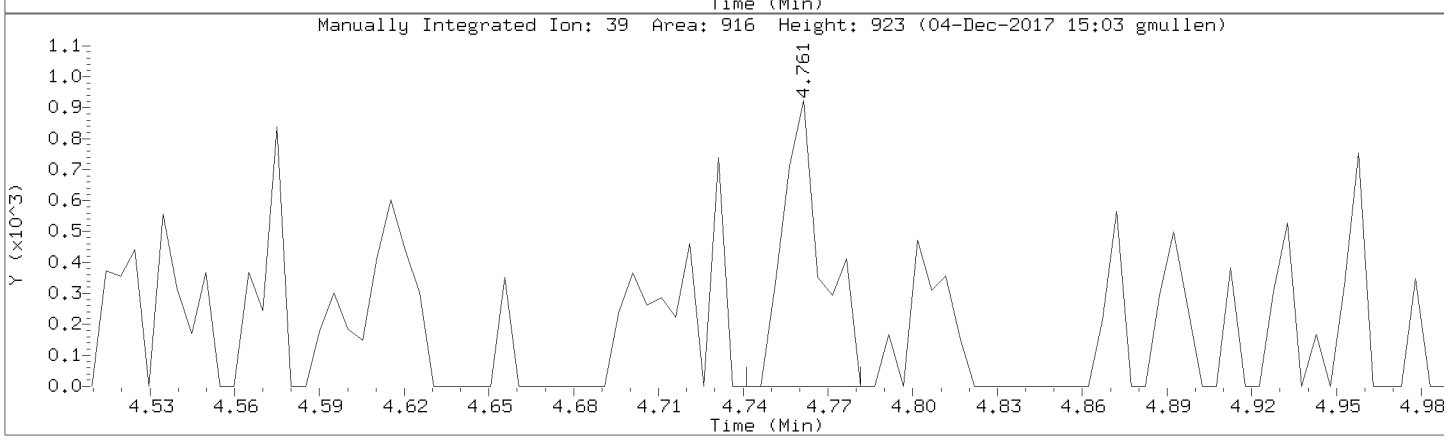
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Acetonitrile Review Code: LT
CAS Number: 75-05-8









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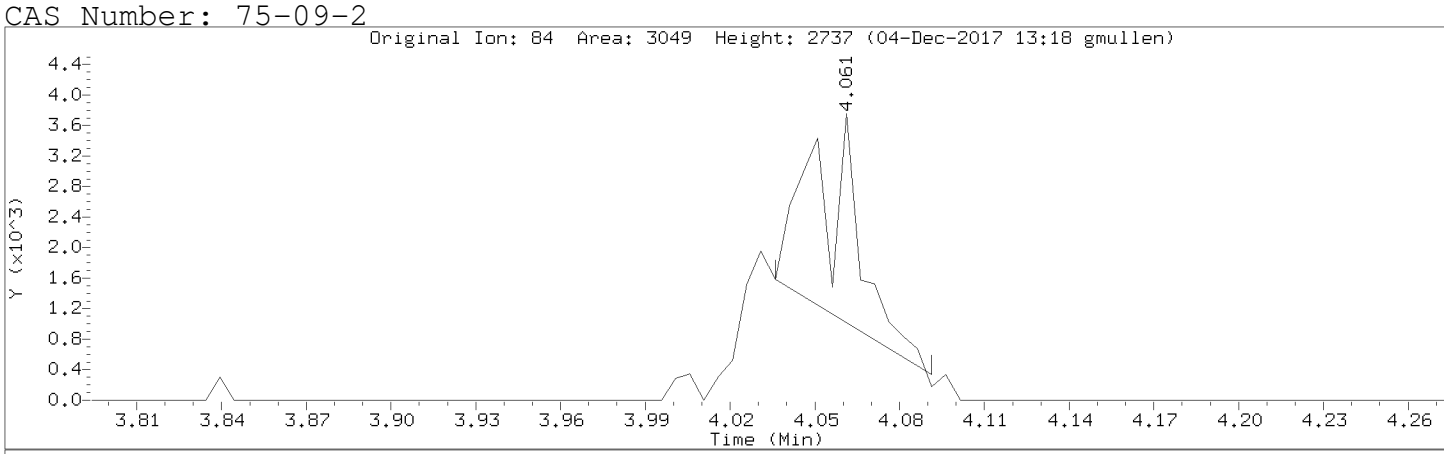
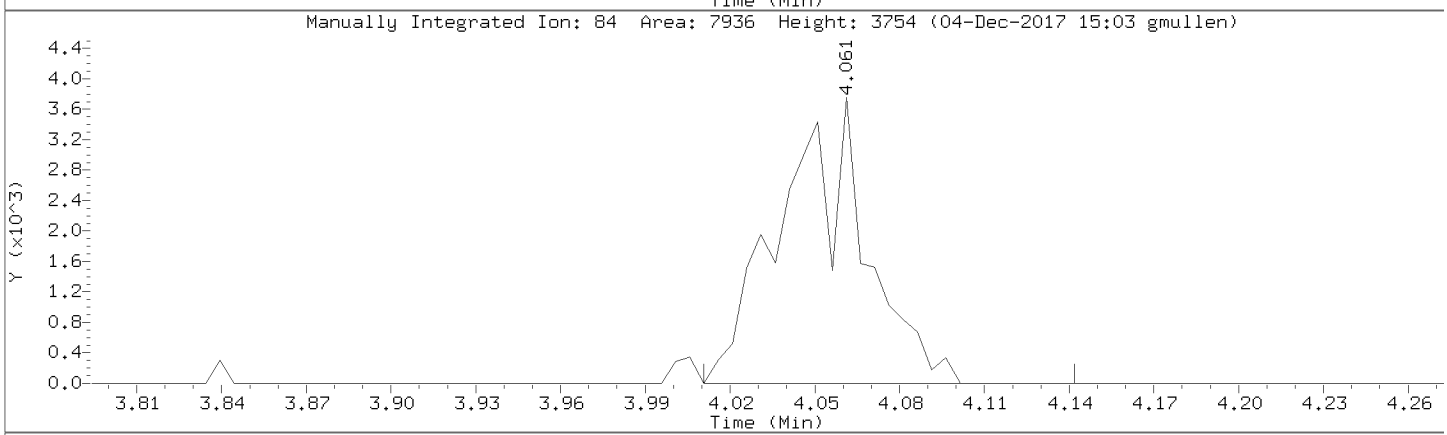
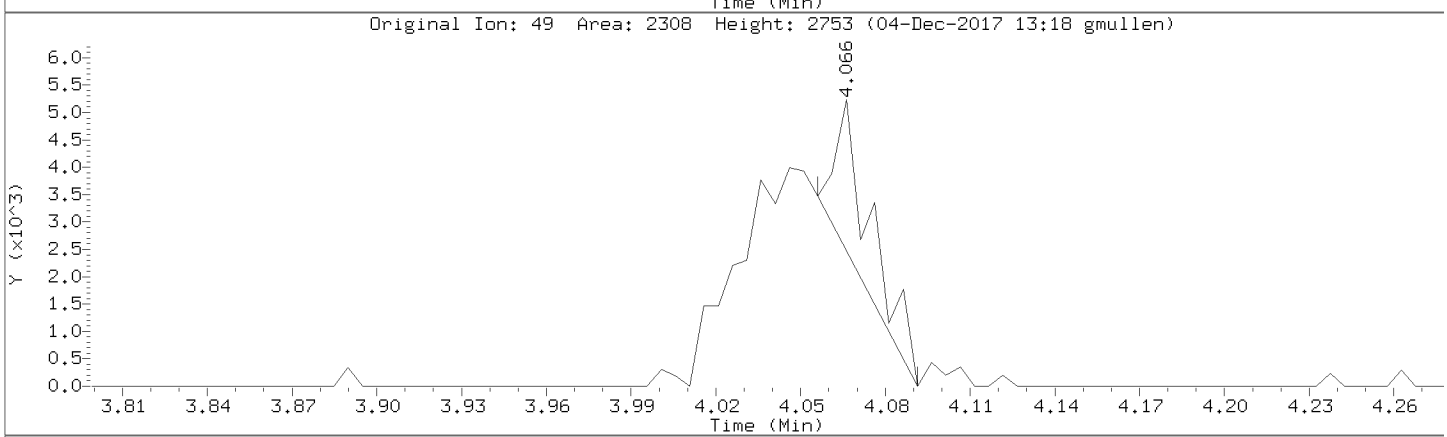
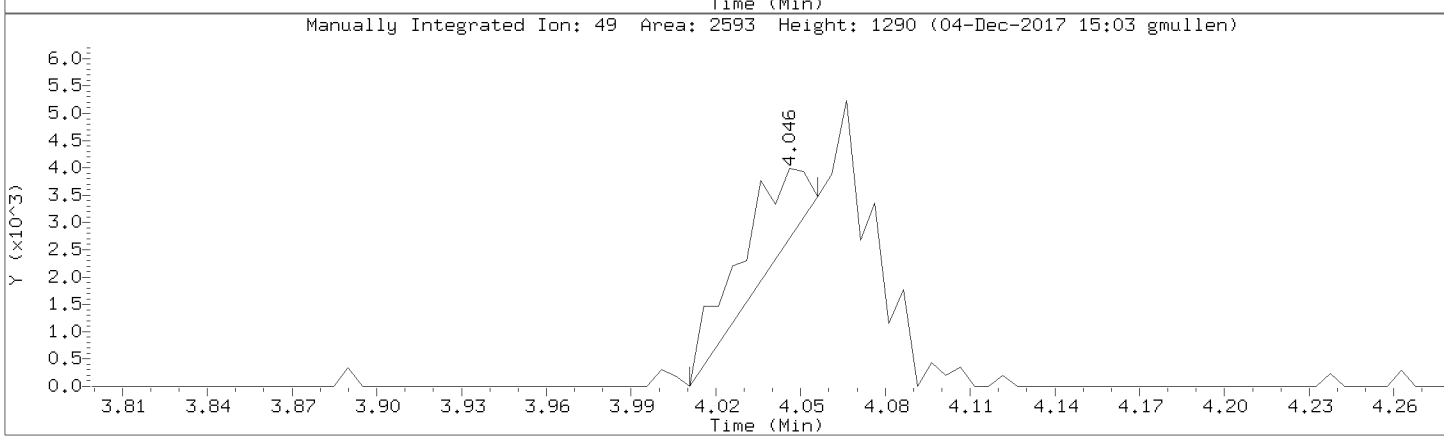
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Methylene Chloride Review Code: LT
CAS Number: 75-09-2









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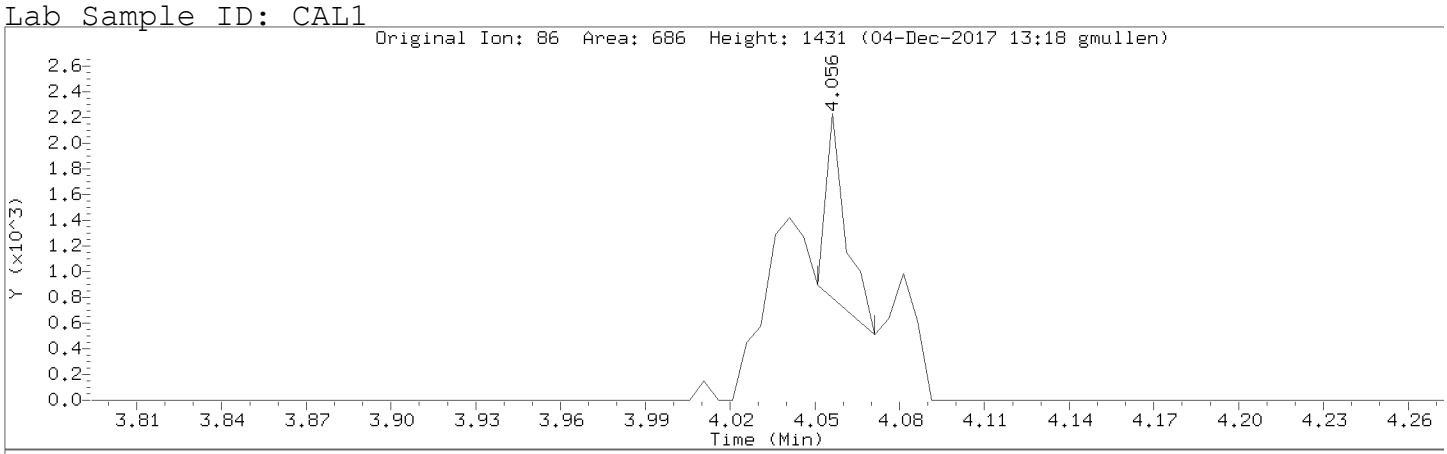

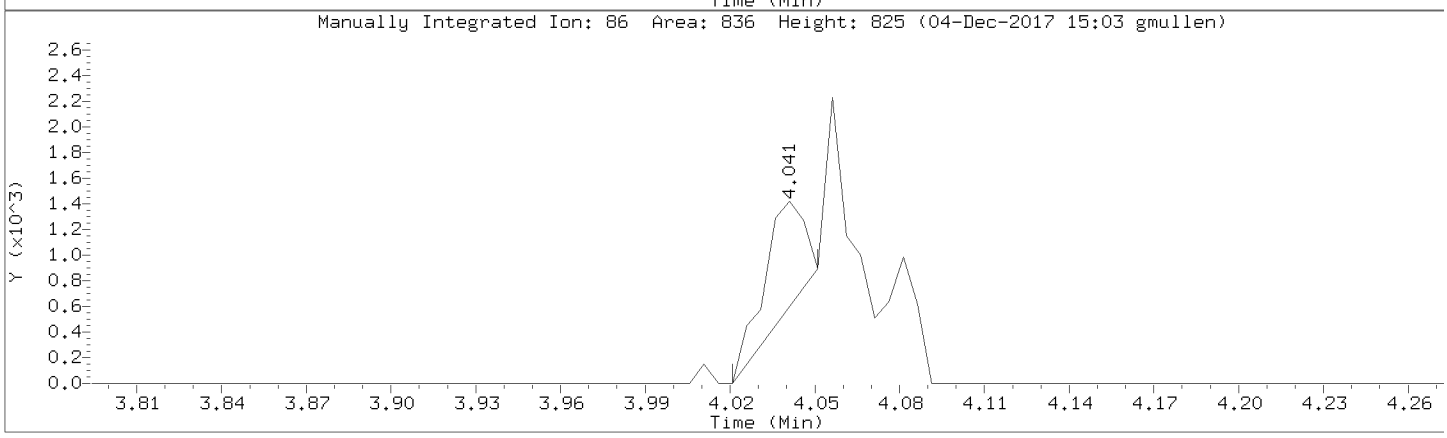

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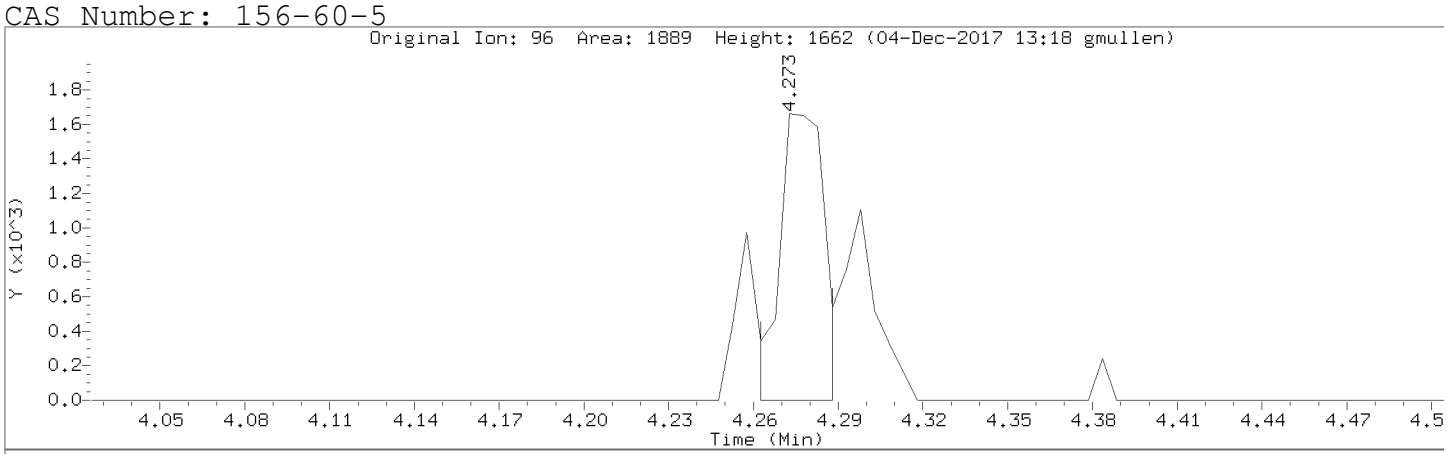
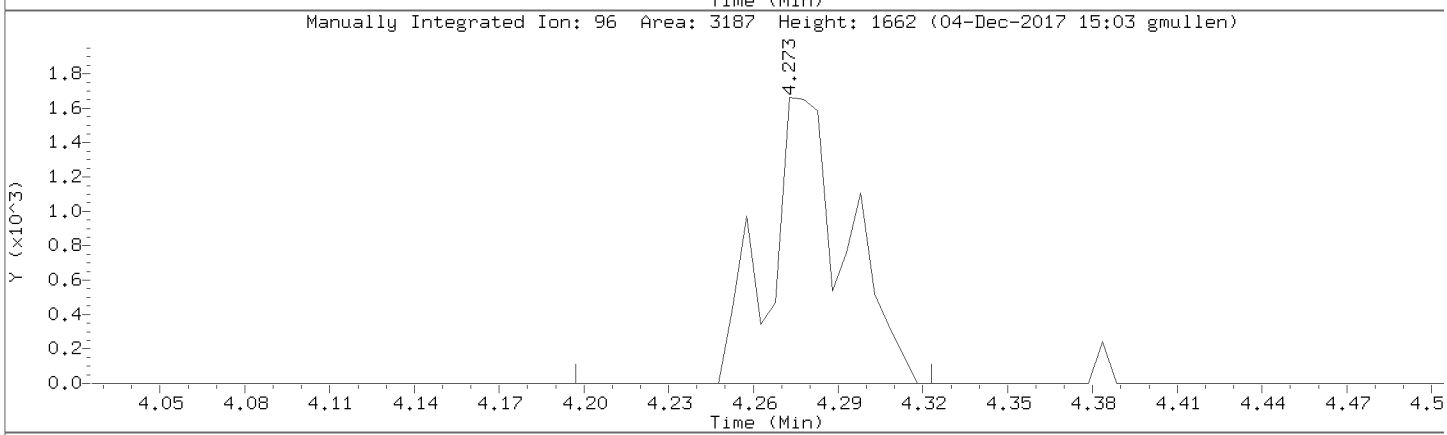
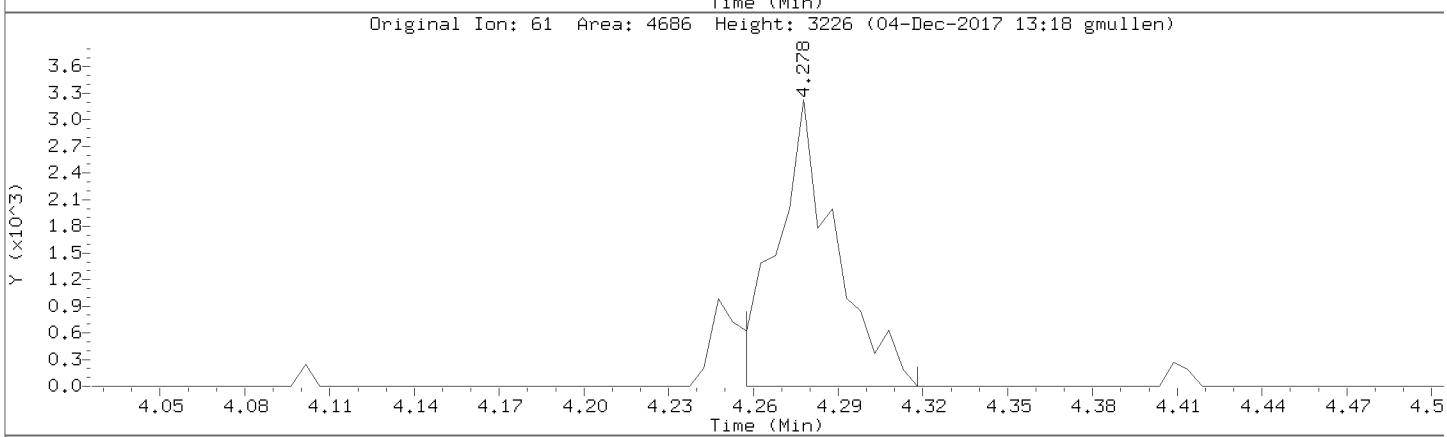
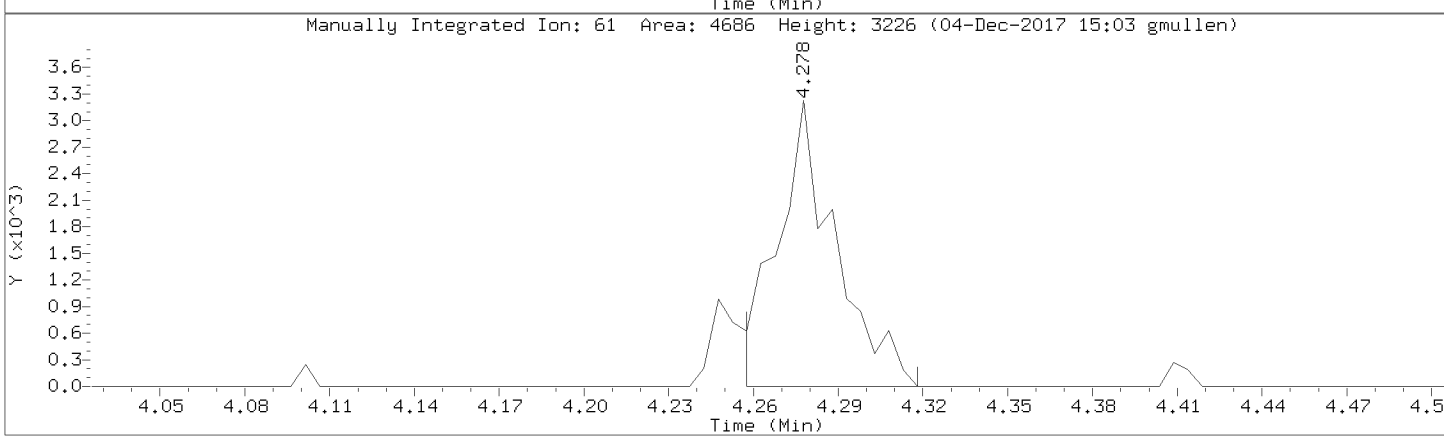
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: trans-1,2-Dichloroethene Review Code: LT
CAS Number: 156-60-5









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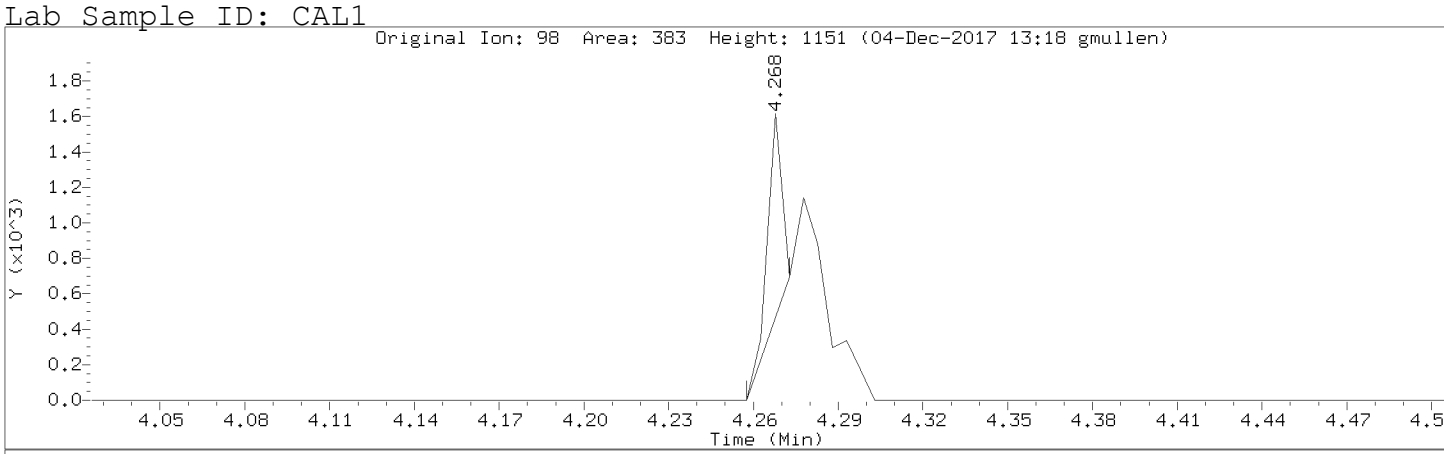
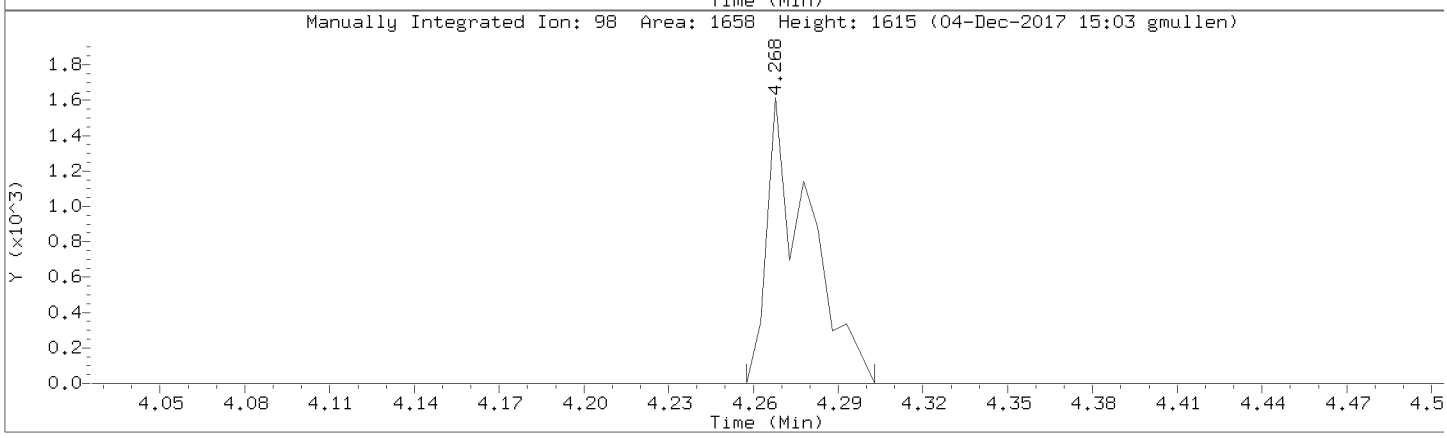
Lab Sample ID: CAL1





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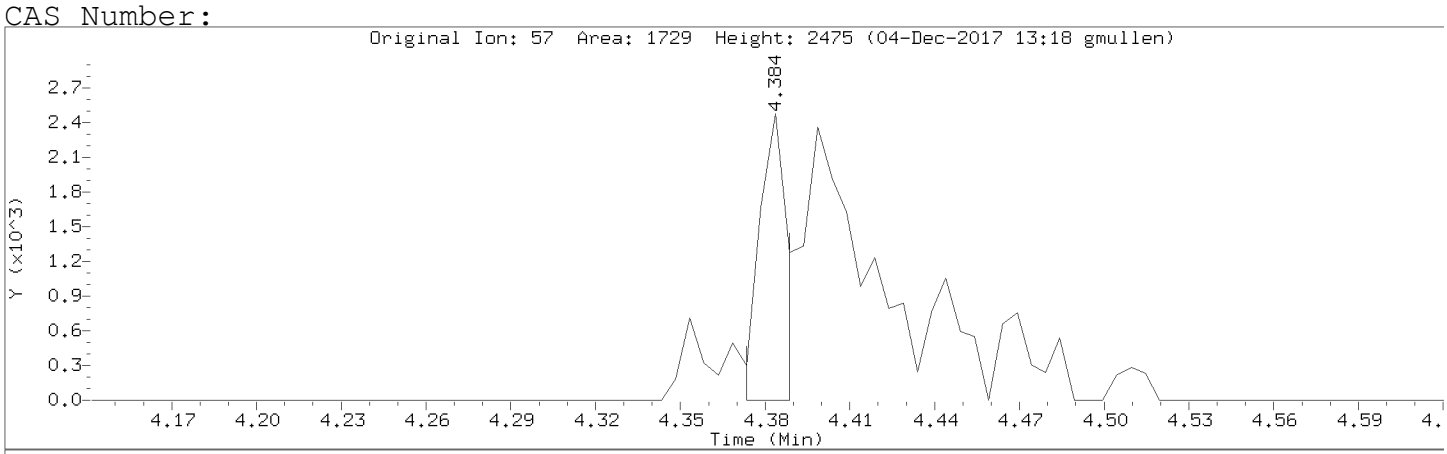
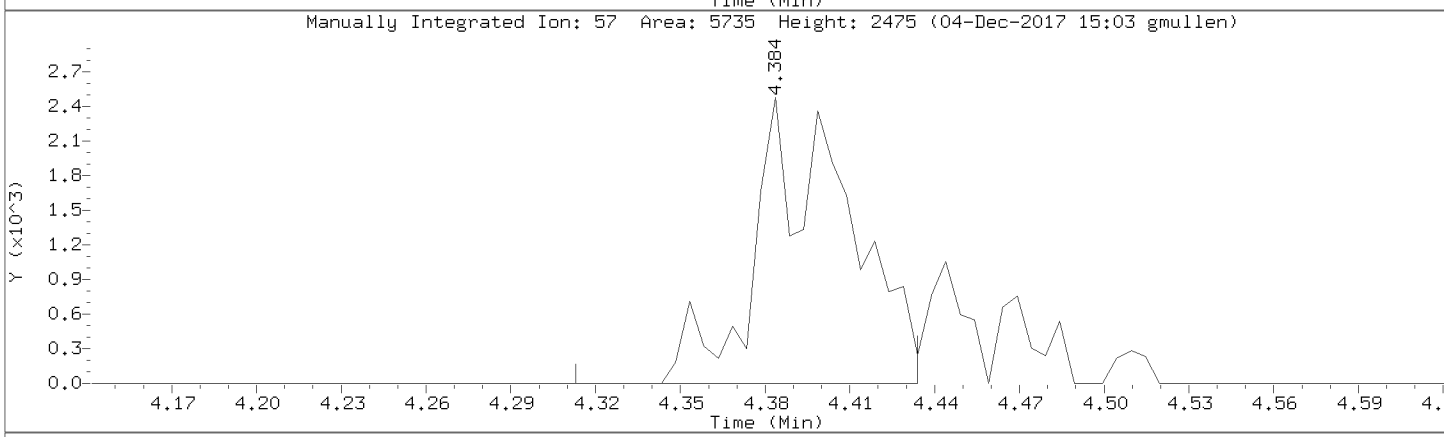
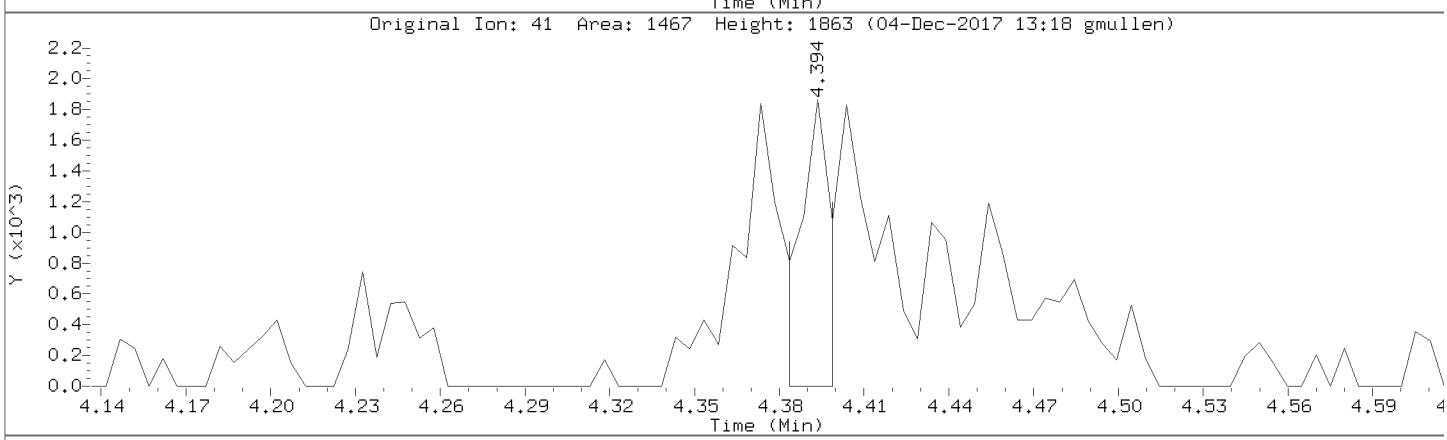
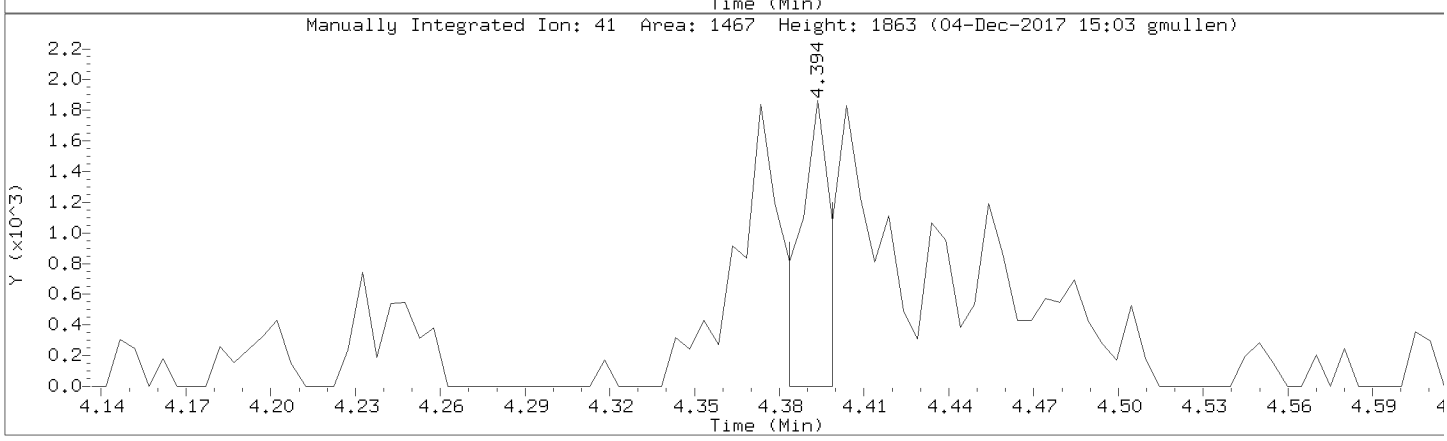
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: n-Hexane Review Code: LT
CAS Number:









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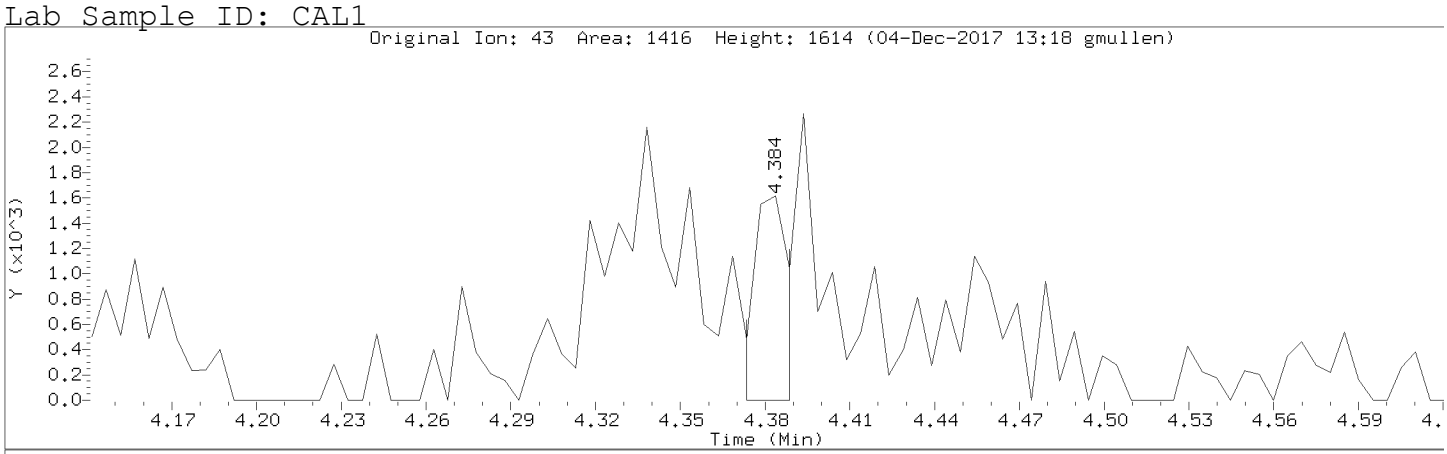
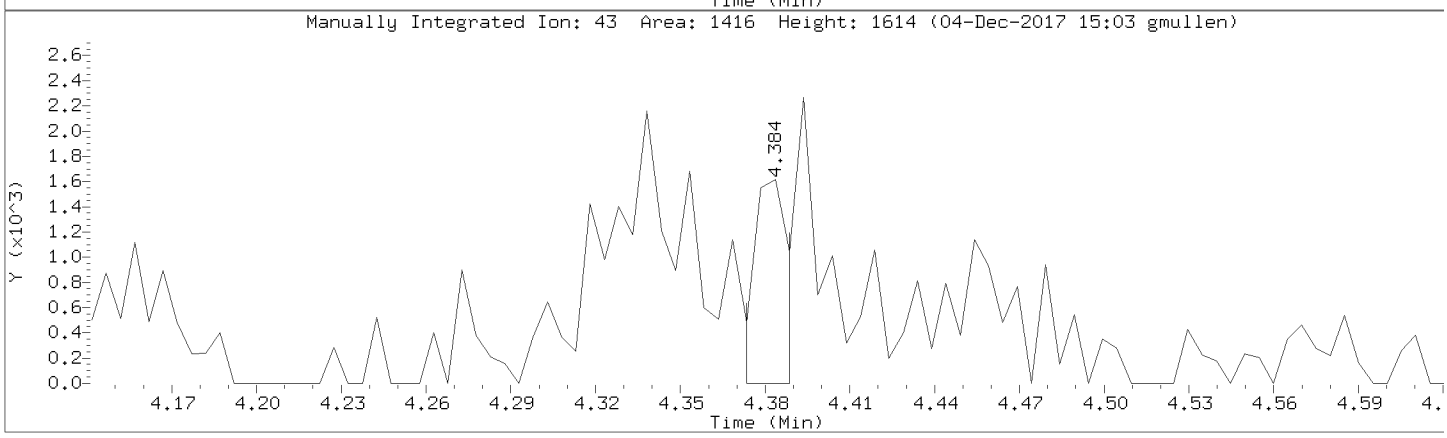
Instrument: 20msvd.i
Lab Sample ID: CAL1





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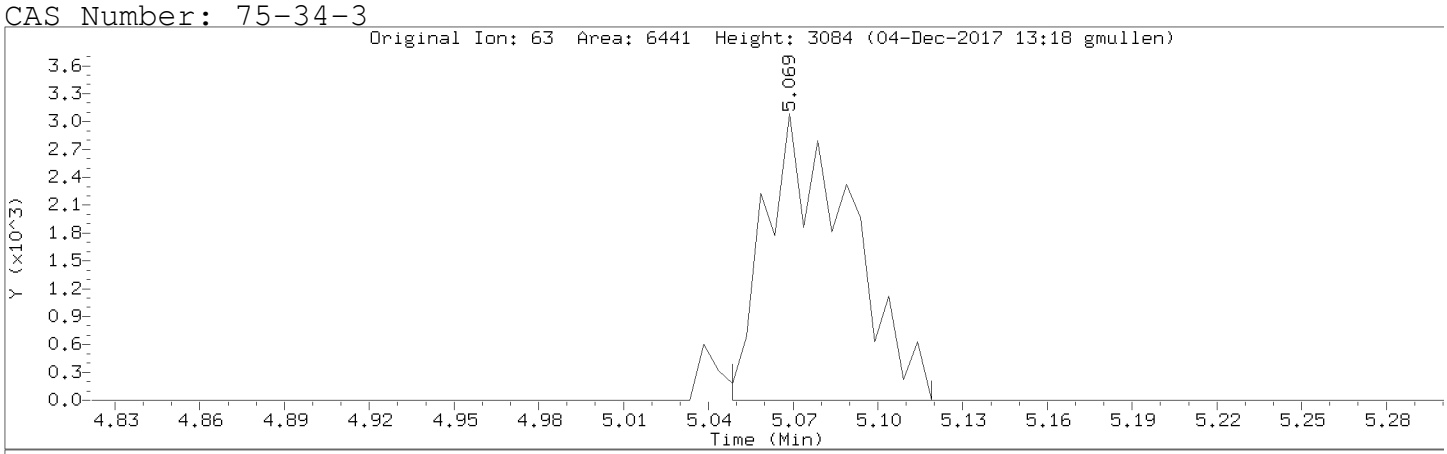
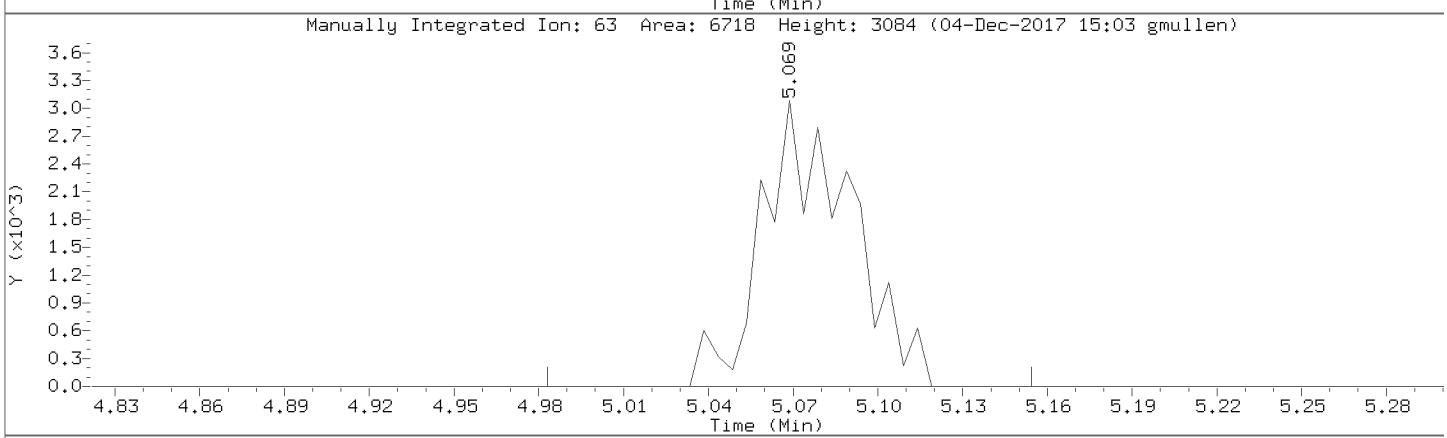
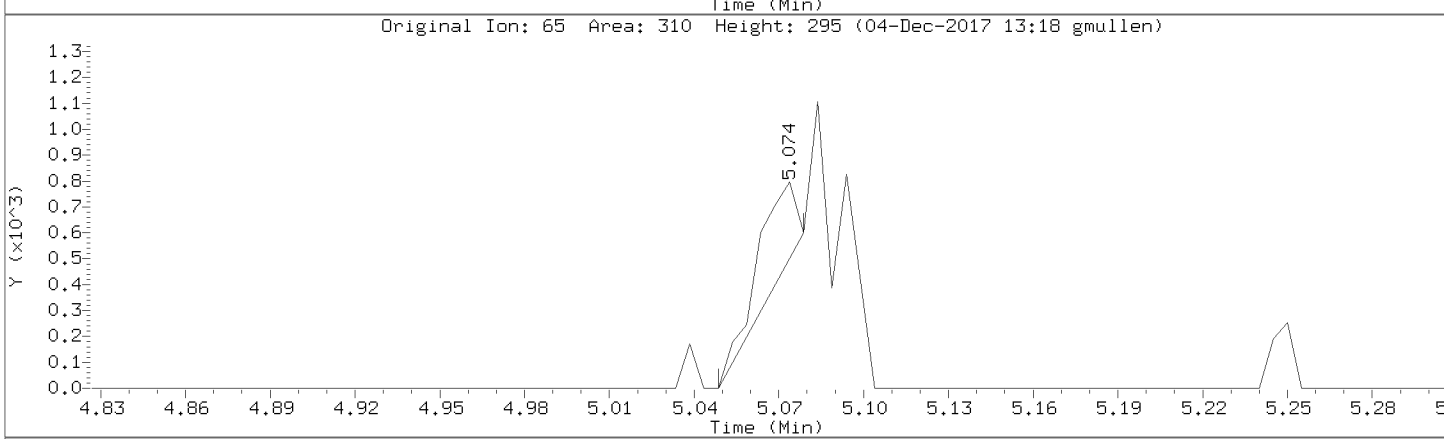
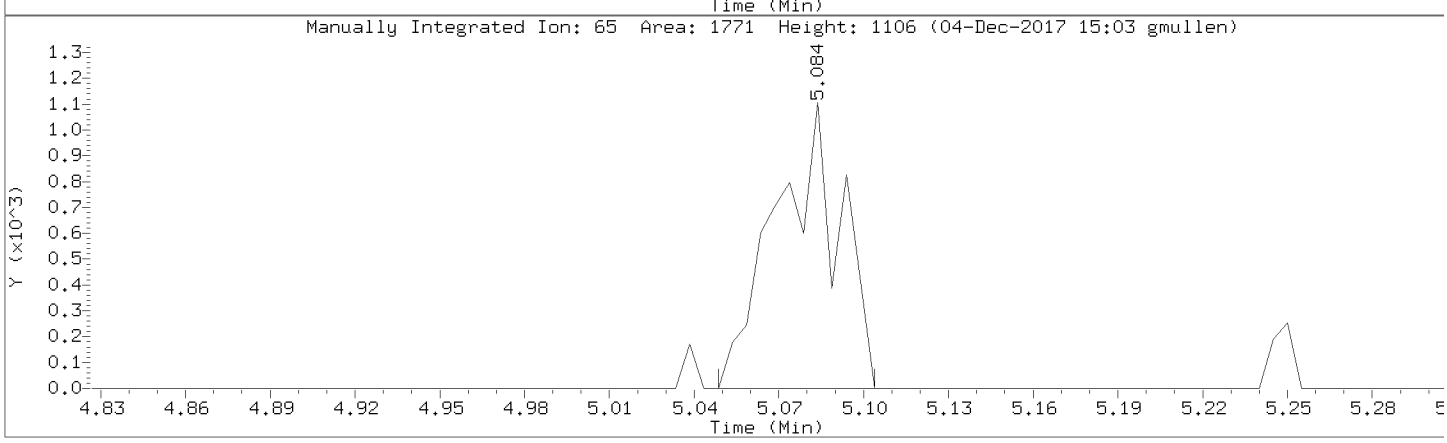
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,1-Dichloroethane Review Code: LT
CAS Number: 75-34-3









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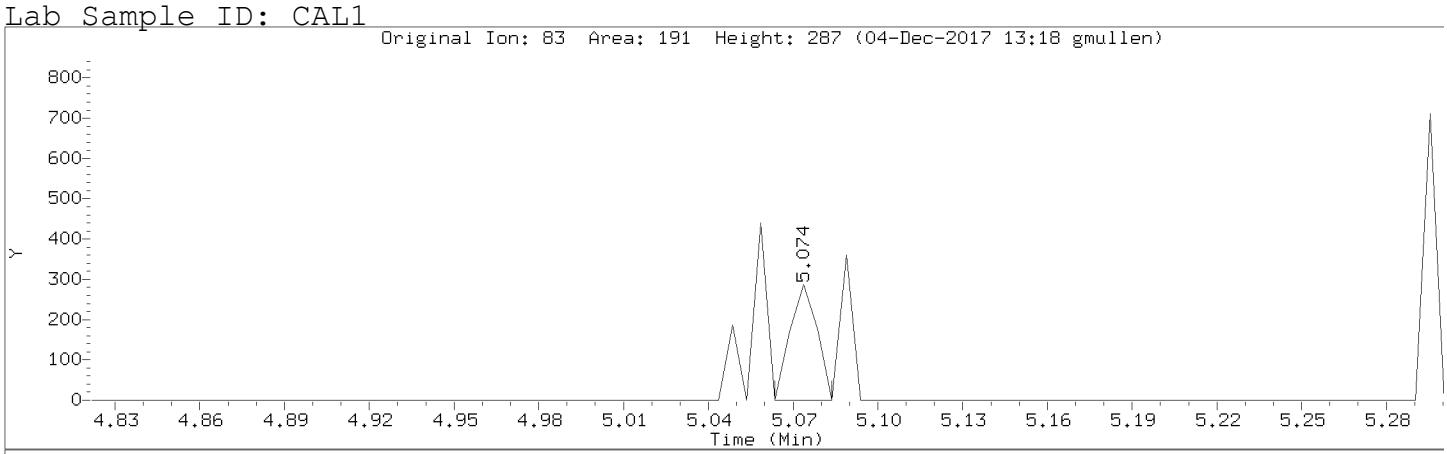
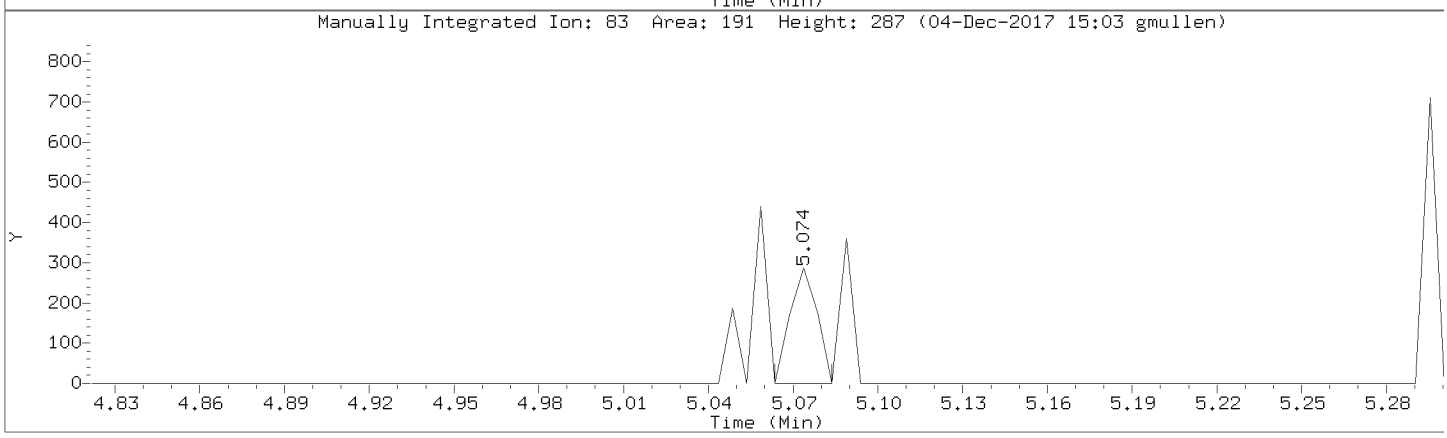
Lab Sample ID: CAL1





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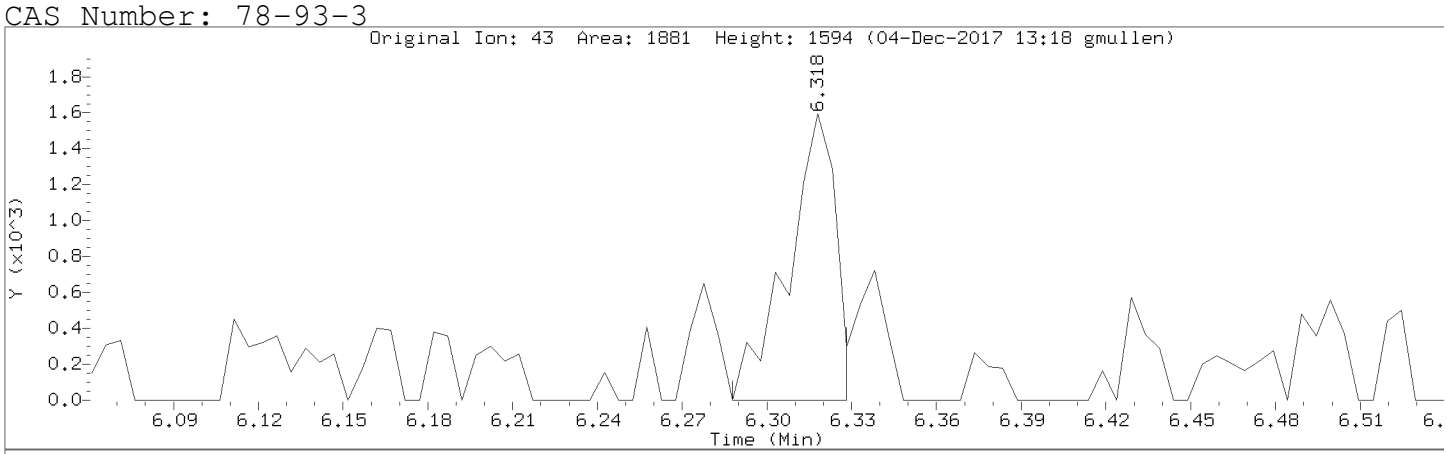
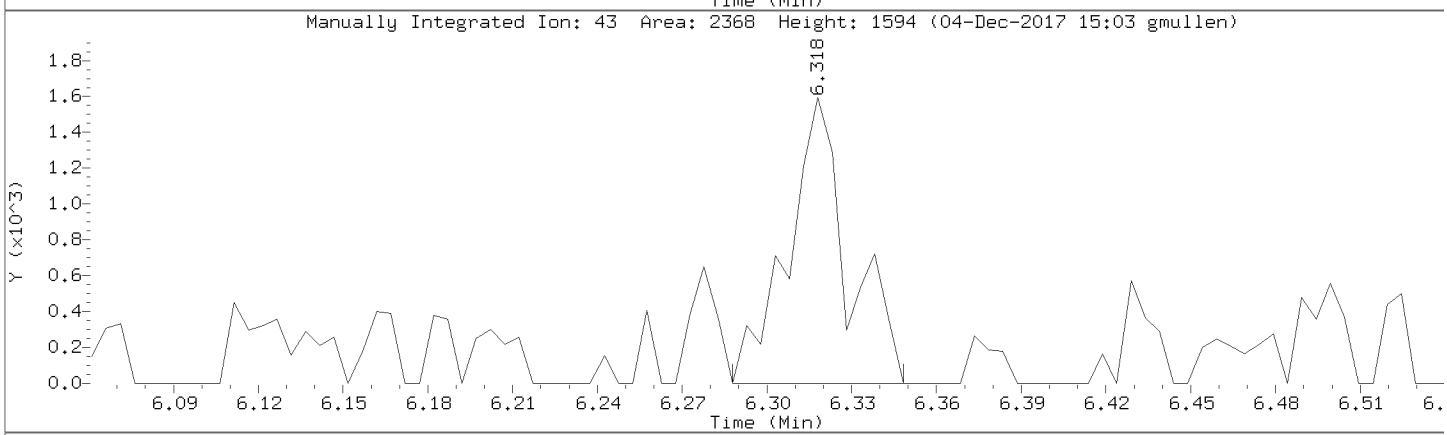
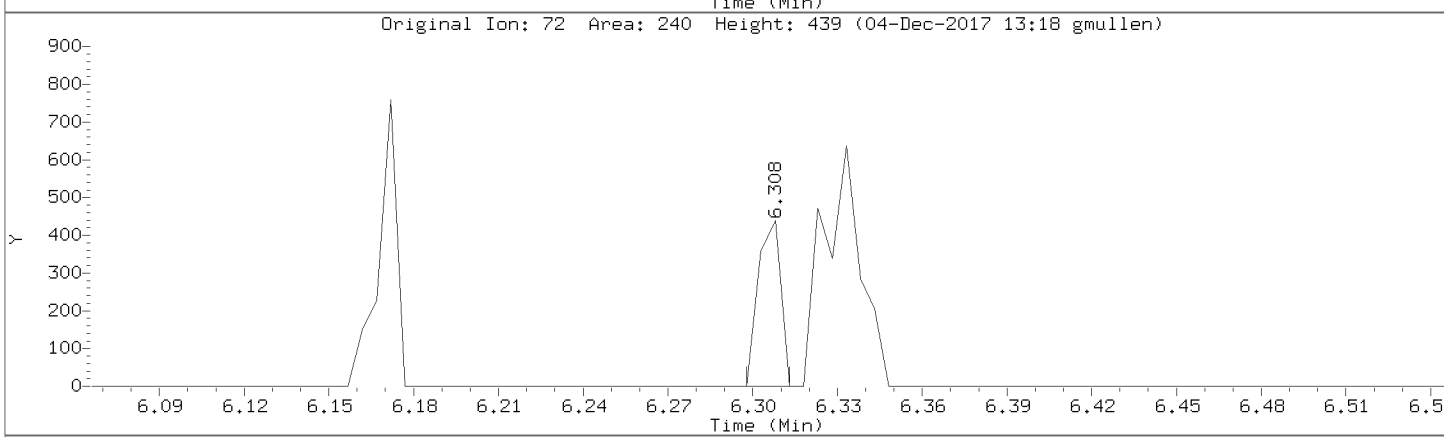
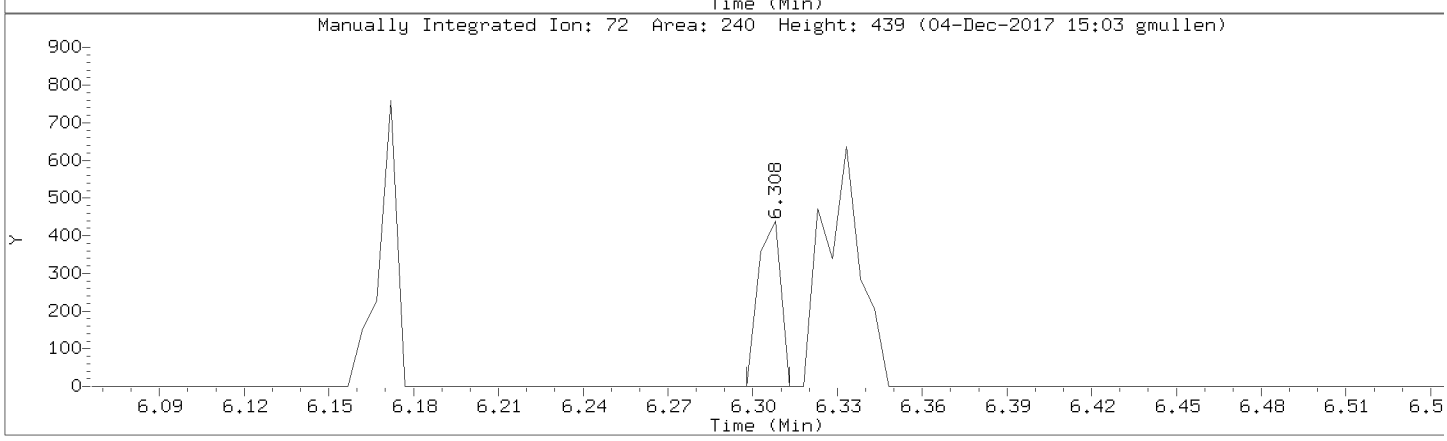
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 2-Butanone (MEK) Review Code:
CAS Number: 78-93-3









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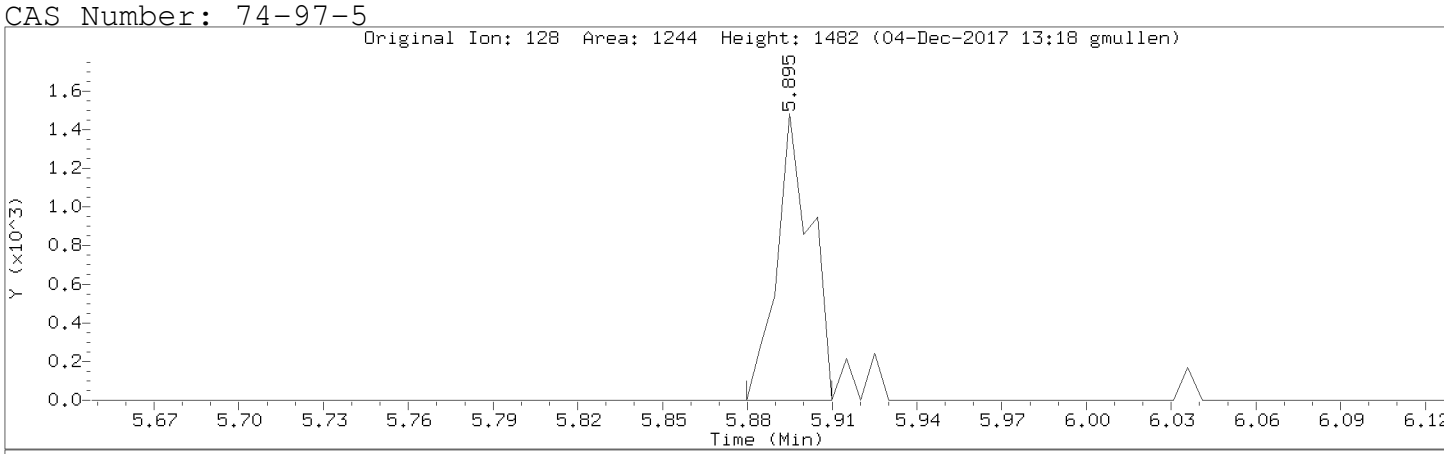
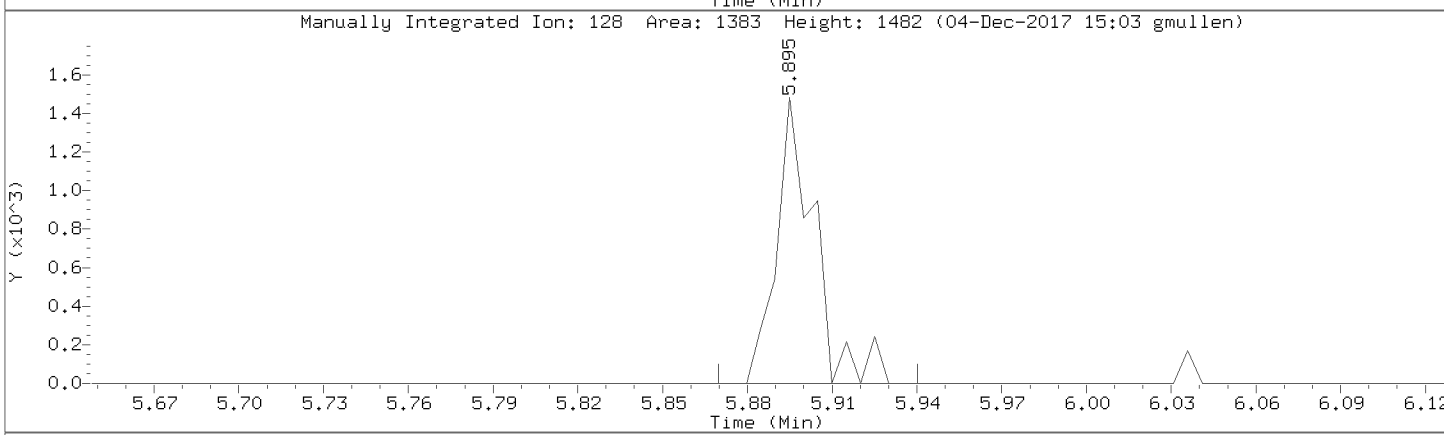
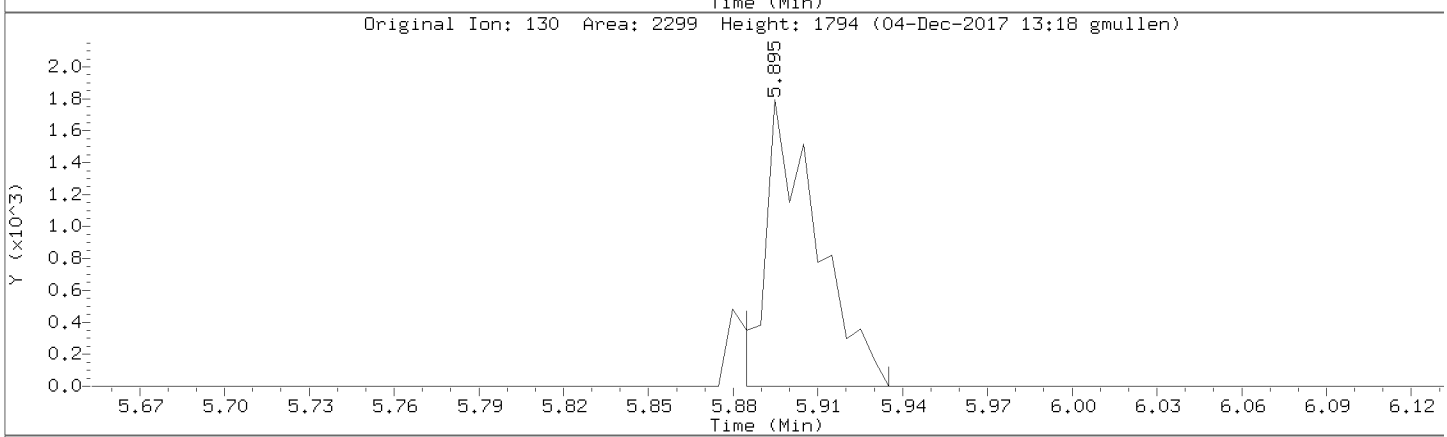
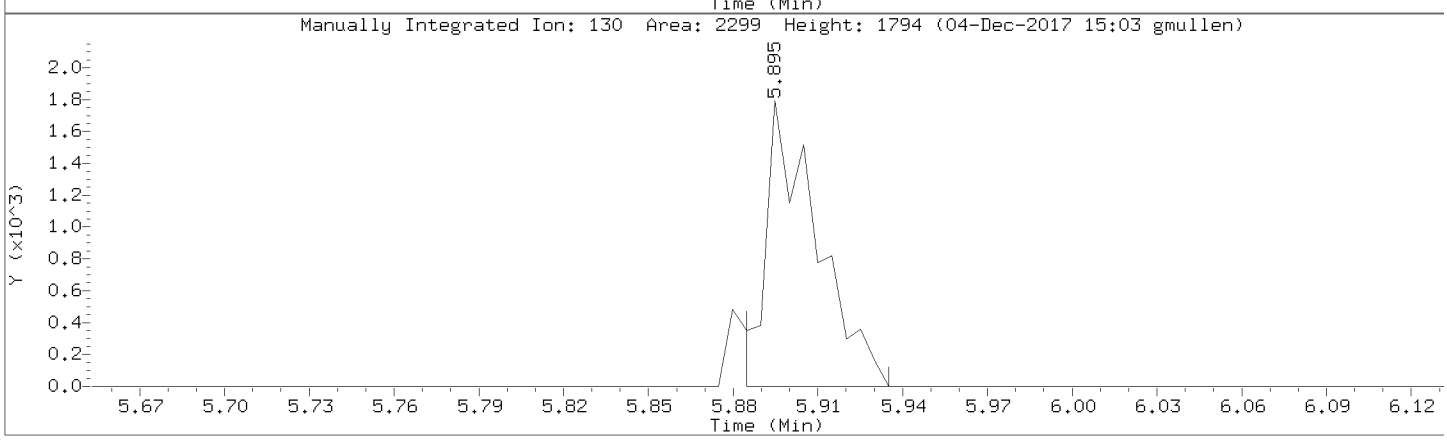
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Bromochloromethane Review Code: LT
CAS Number: 74-97-5









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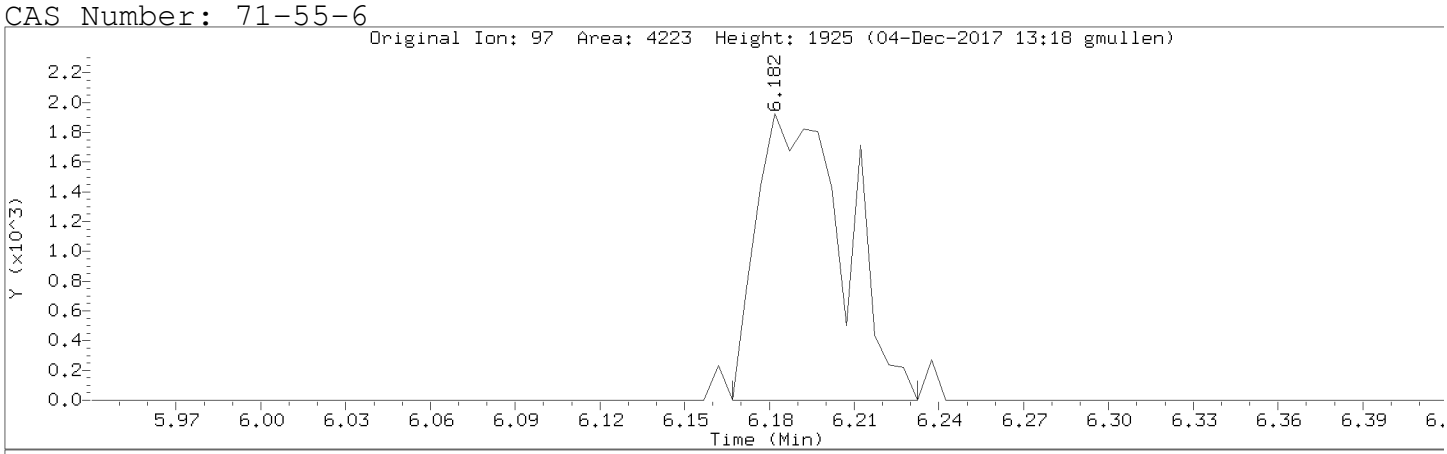
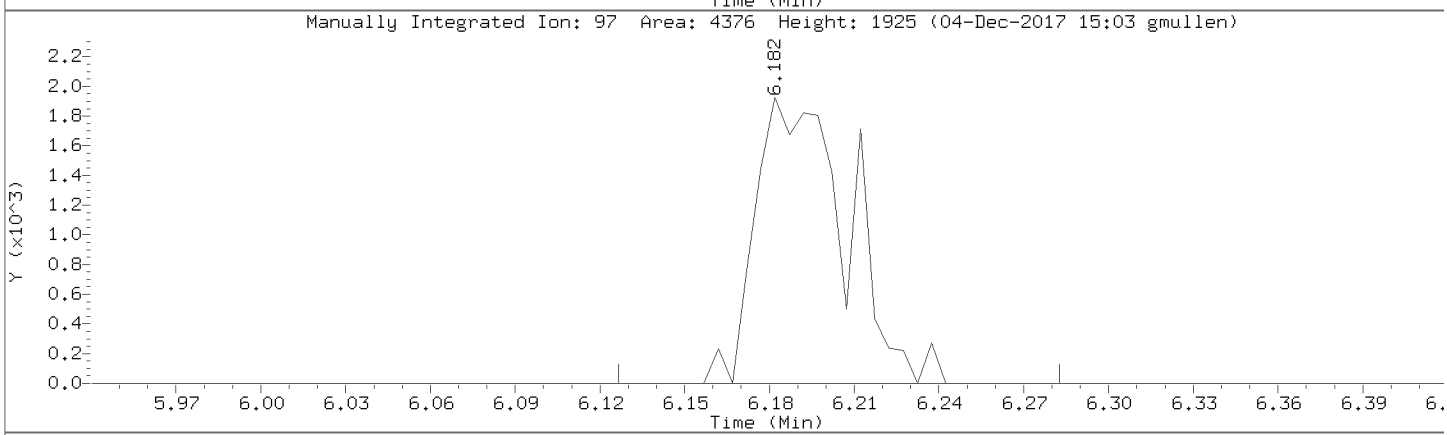
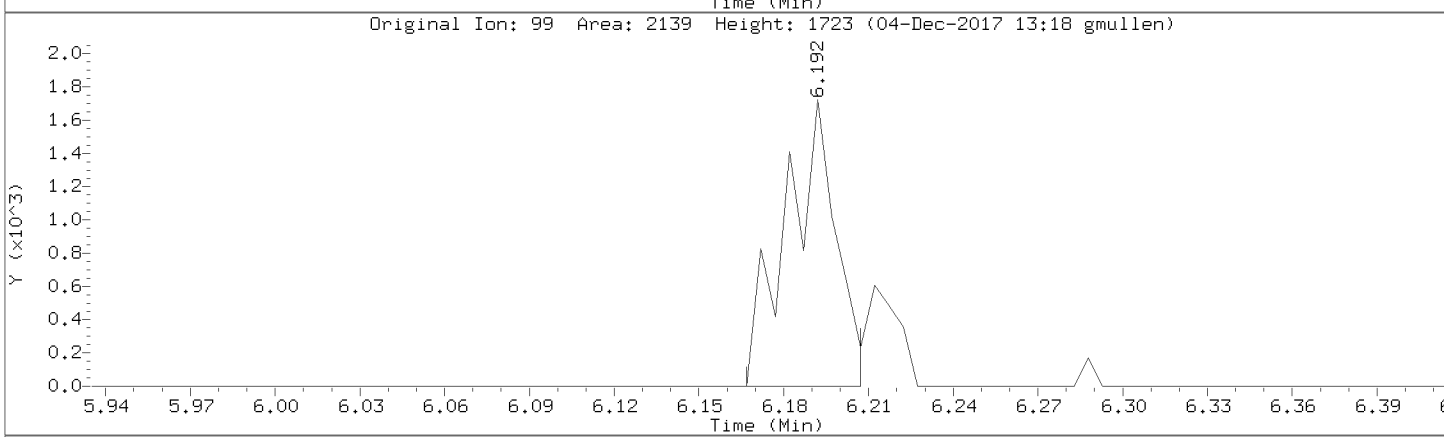
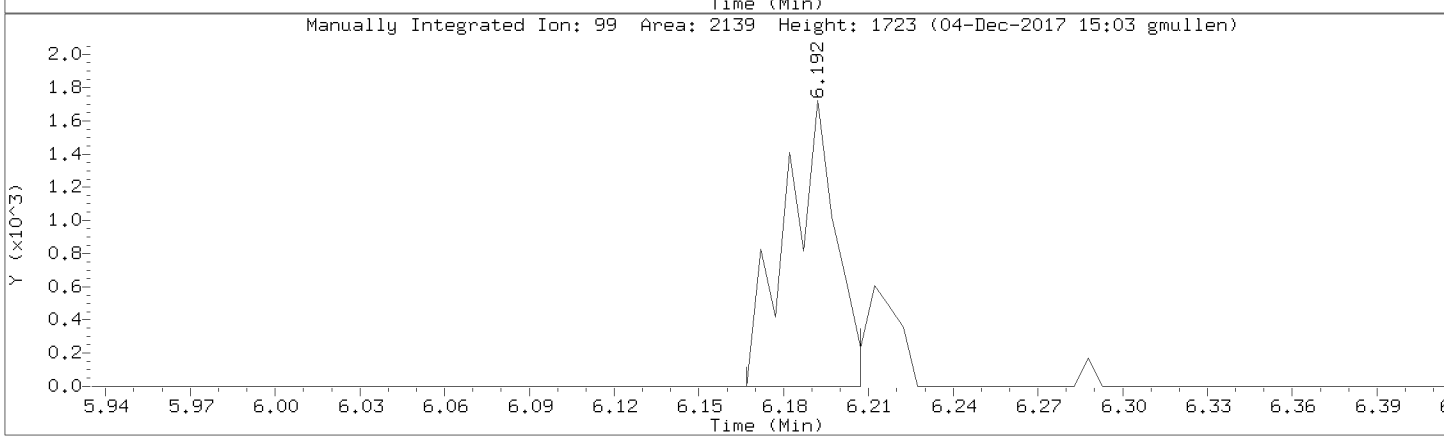
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,1,1-Trichloroethane Review Code: LT
CAS Number: 71-55-6









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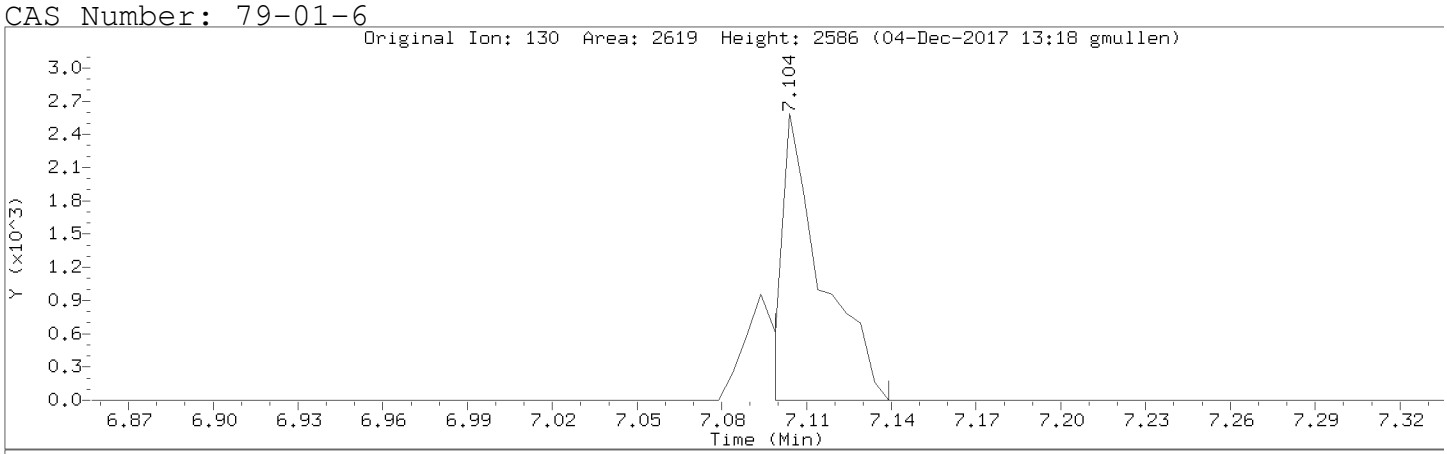
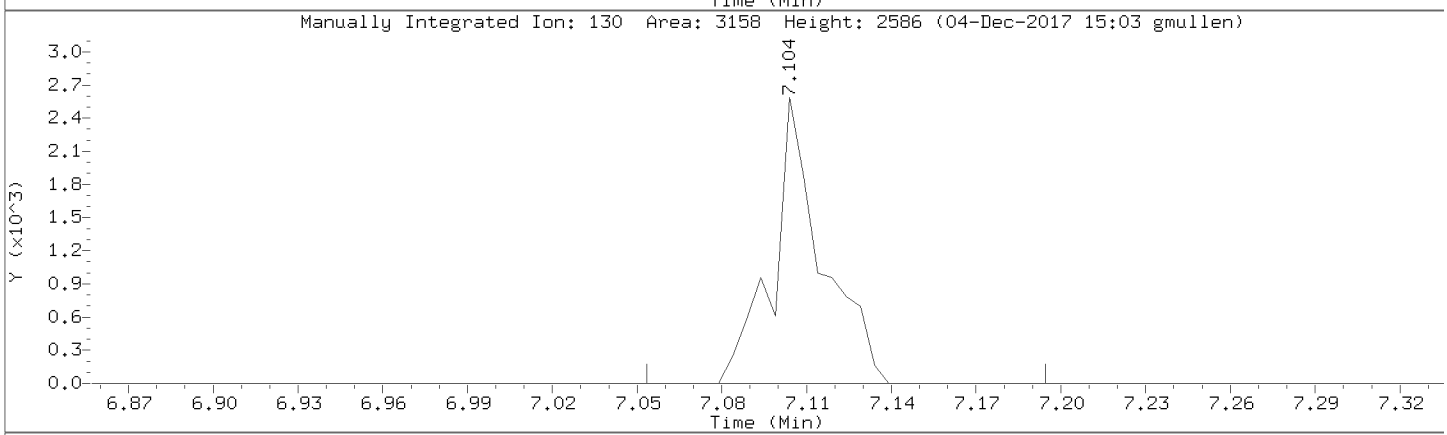
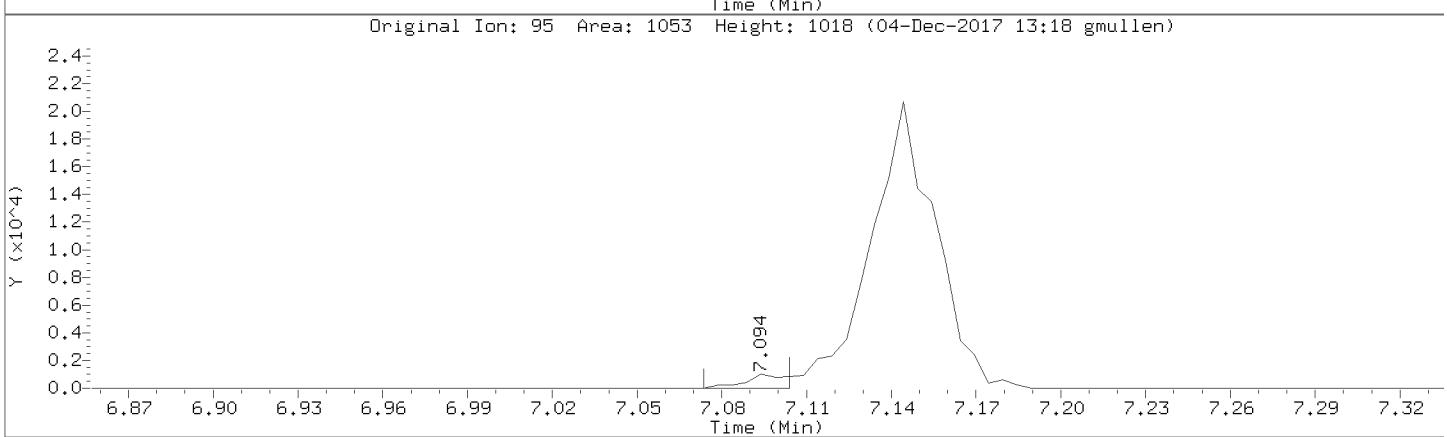
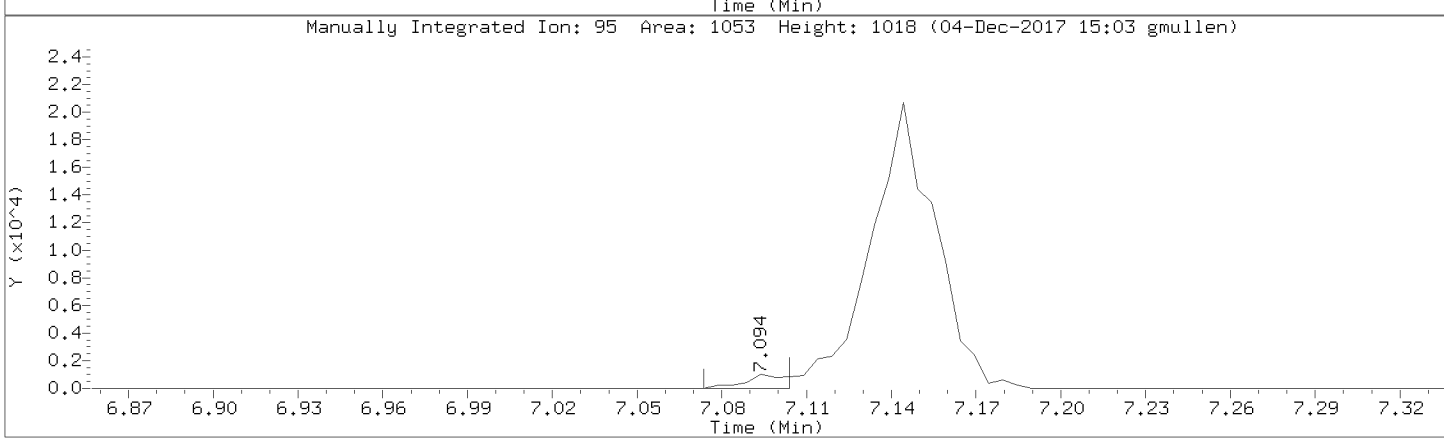
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Trichloroethene Review Code: LT
CAS Number: 79-01-6









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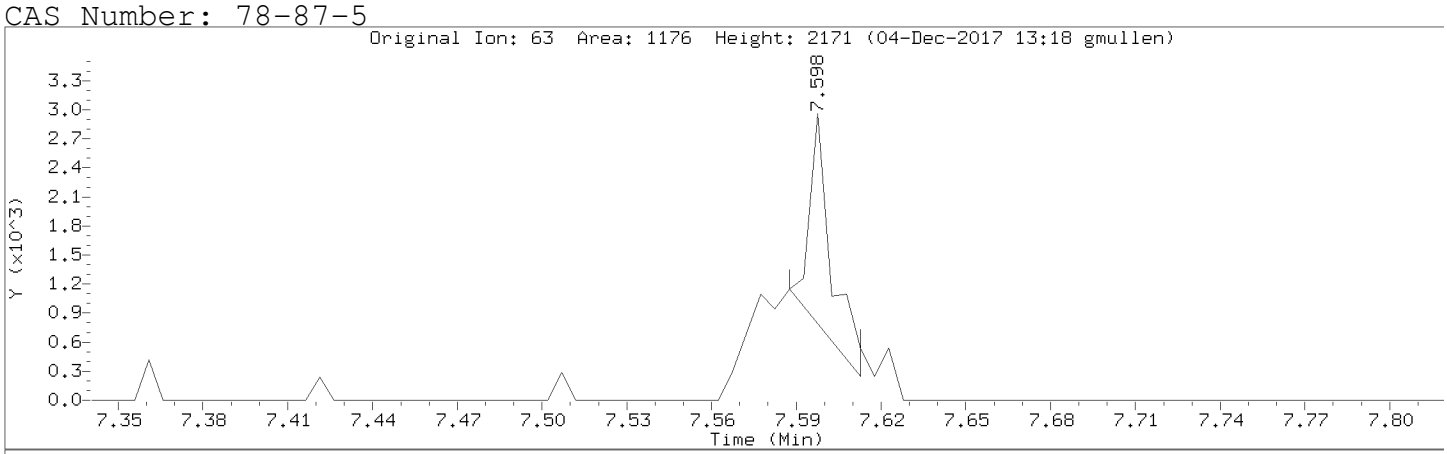
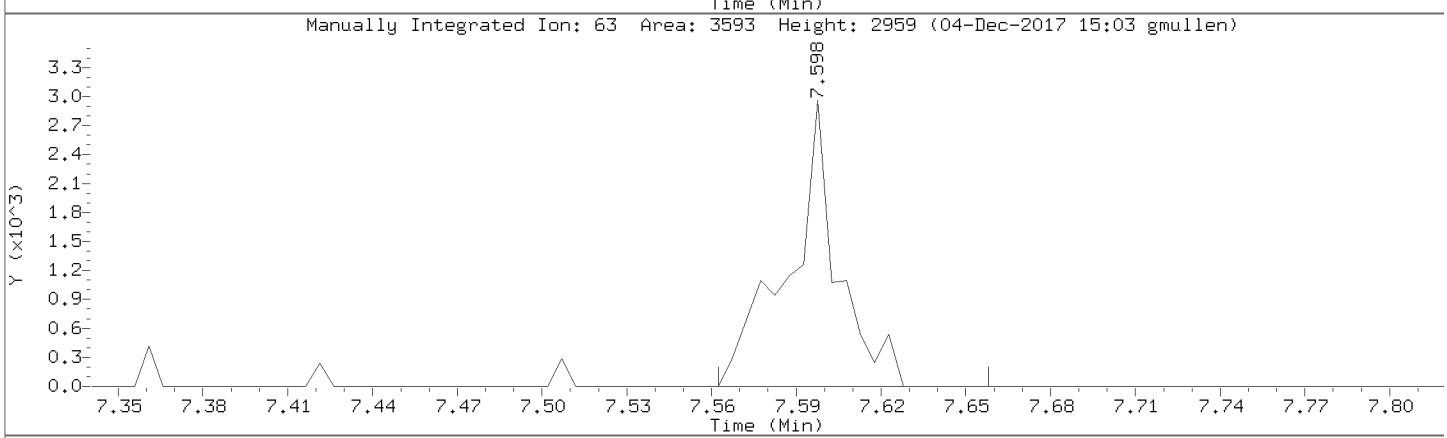
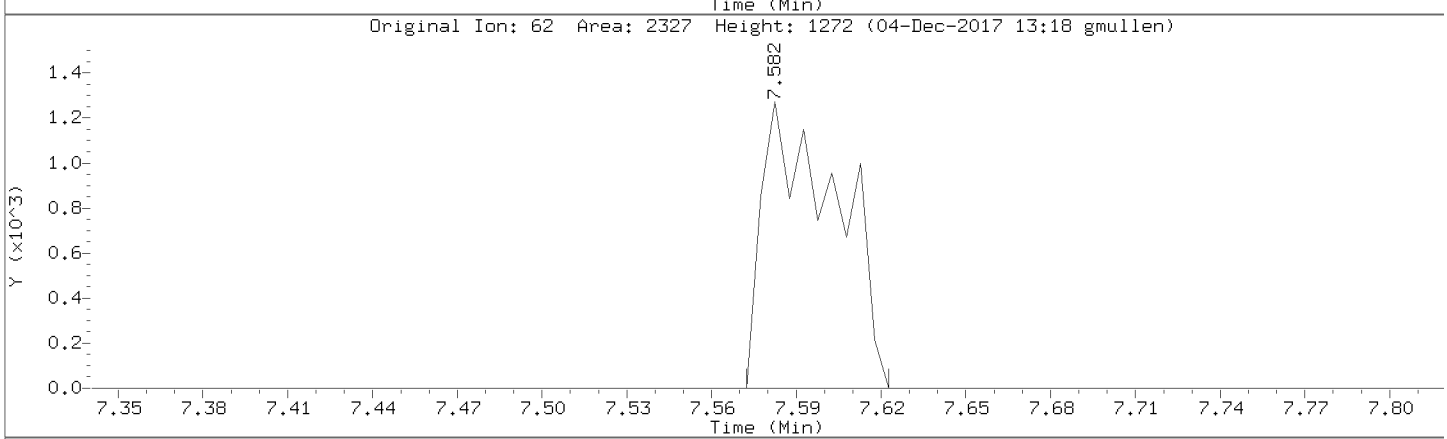
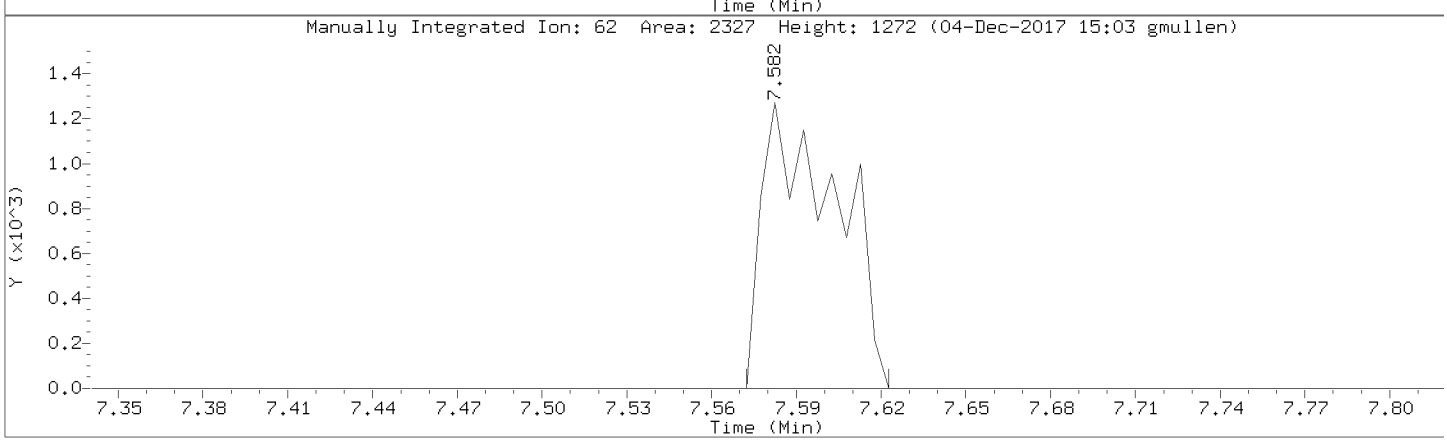
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,2-Dichloropropane Review Code: LT
CAS Number: 78-87-5









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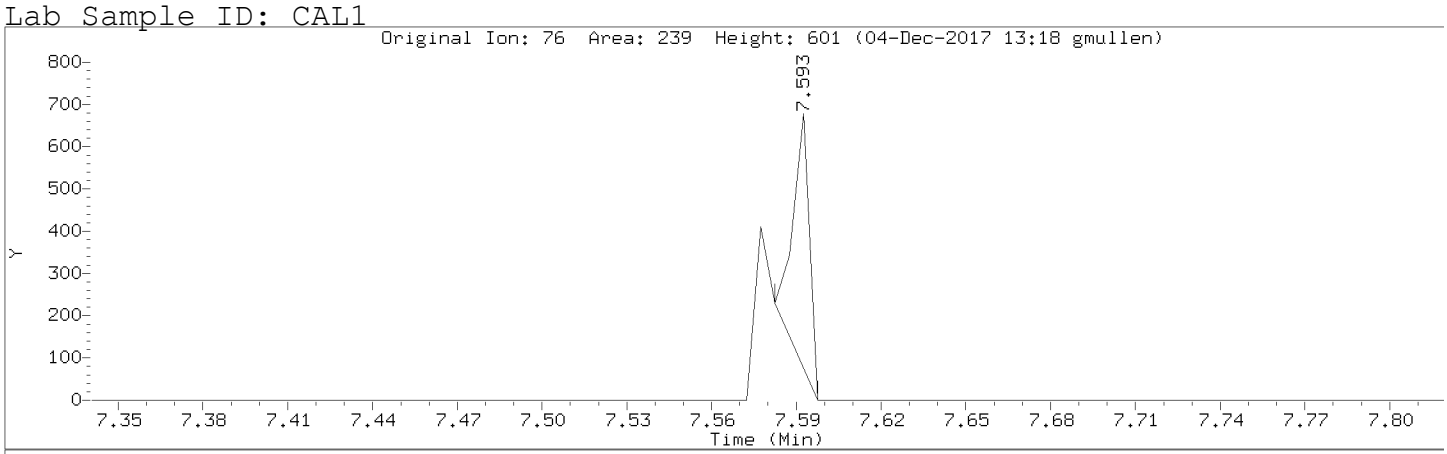
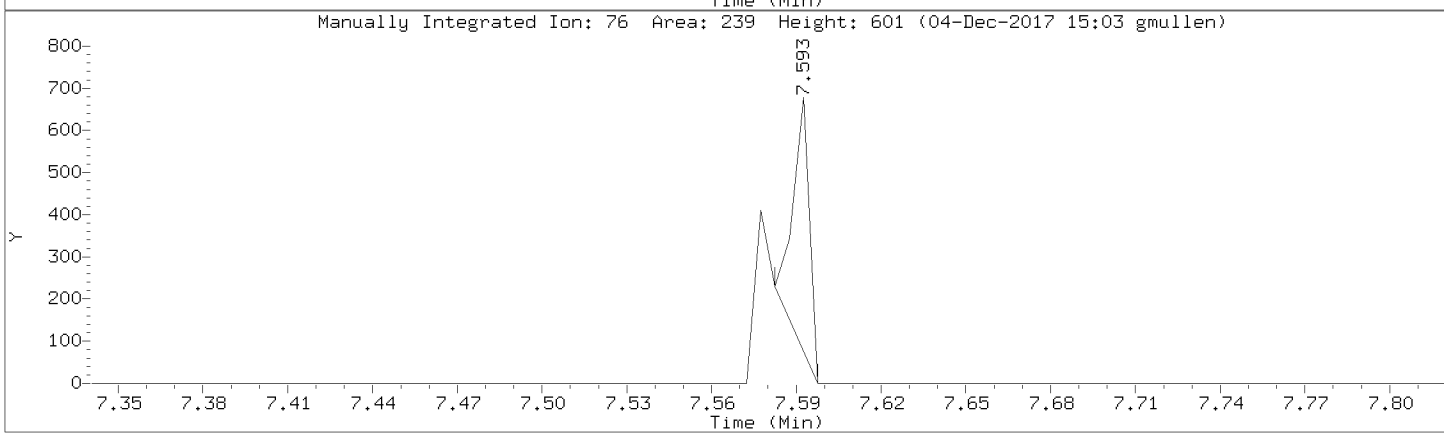
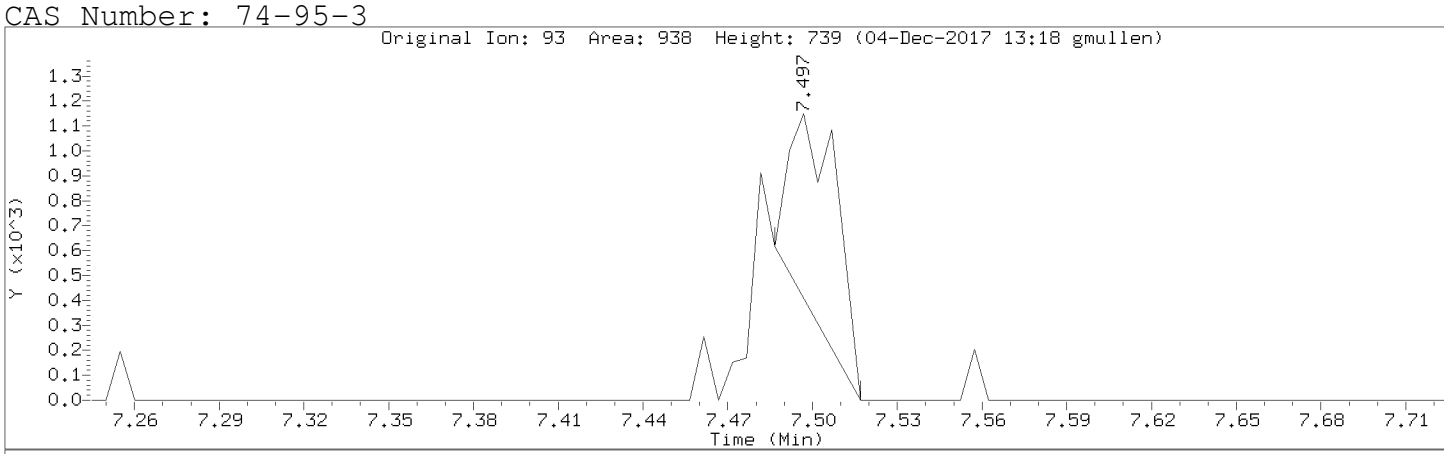
Lab Sample ID: CAL1

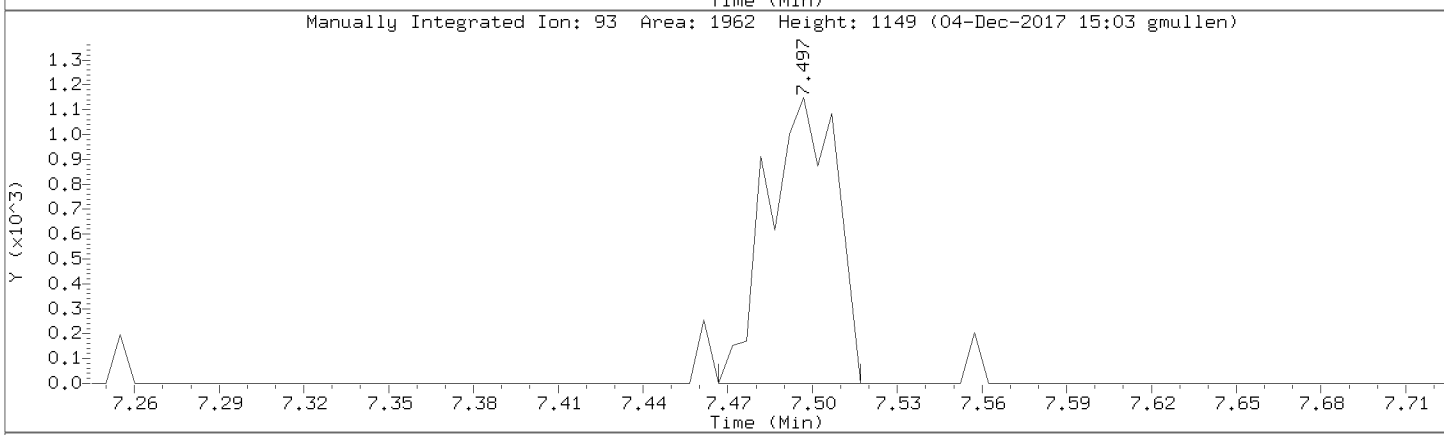


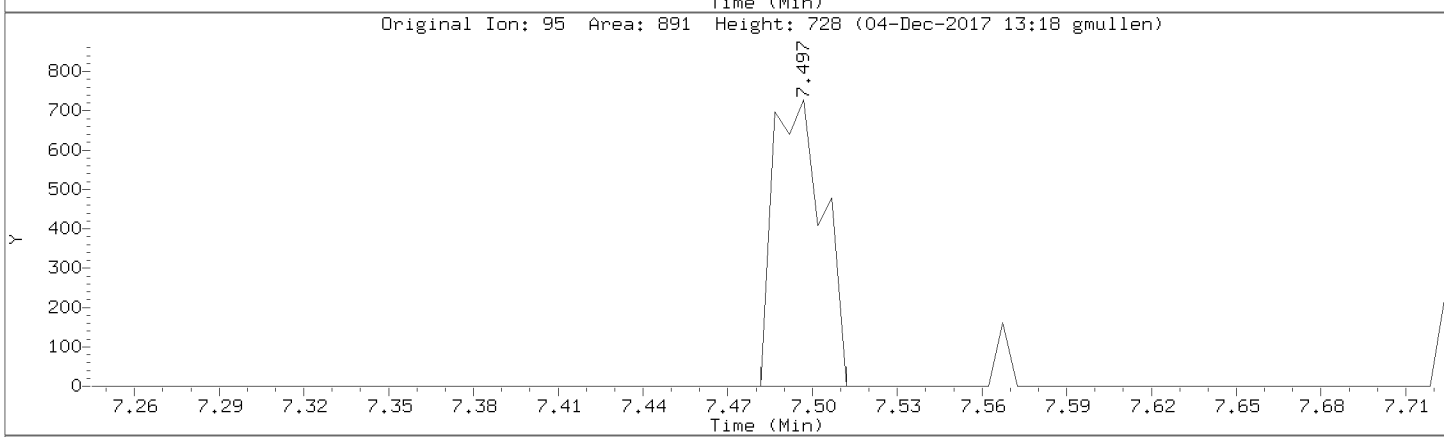


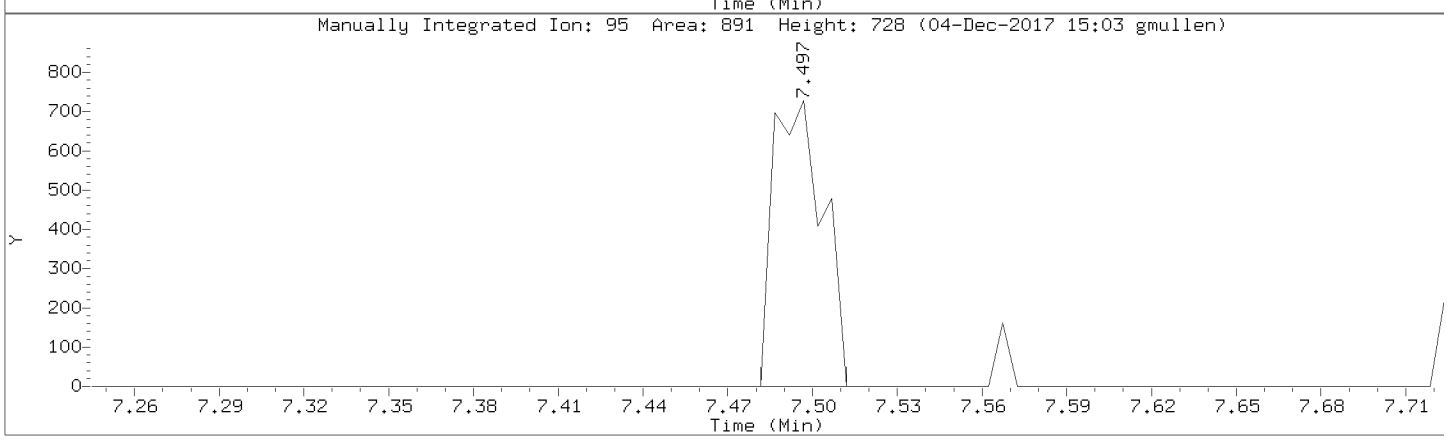
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\120417.b/1204d09.d
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Dibromomethane Review Code: LT
CAS Number: 74-95-3









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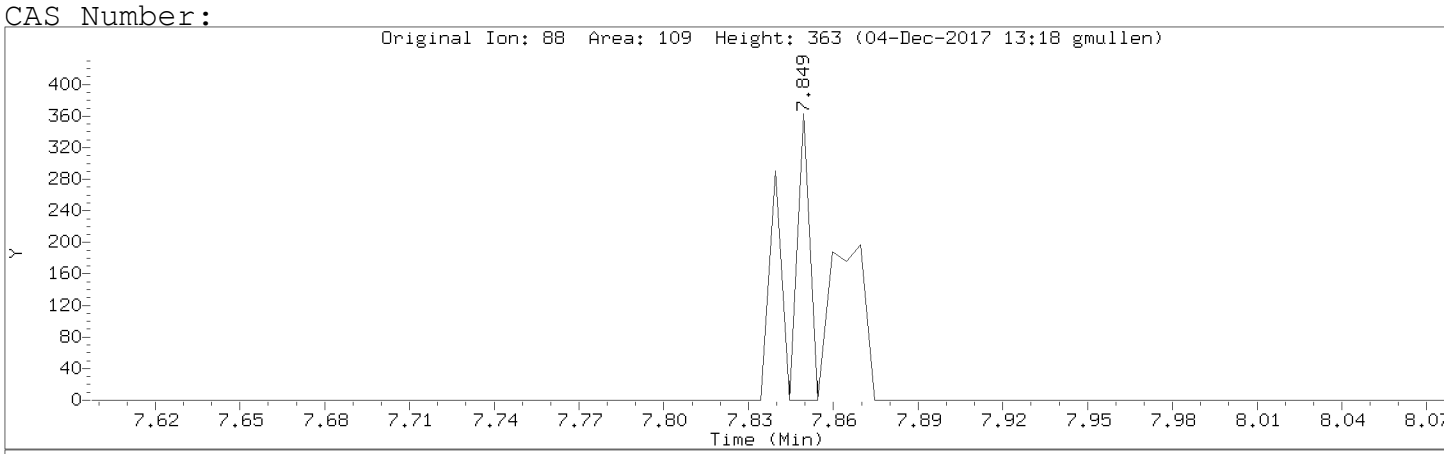
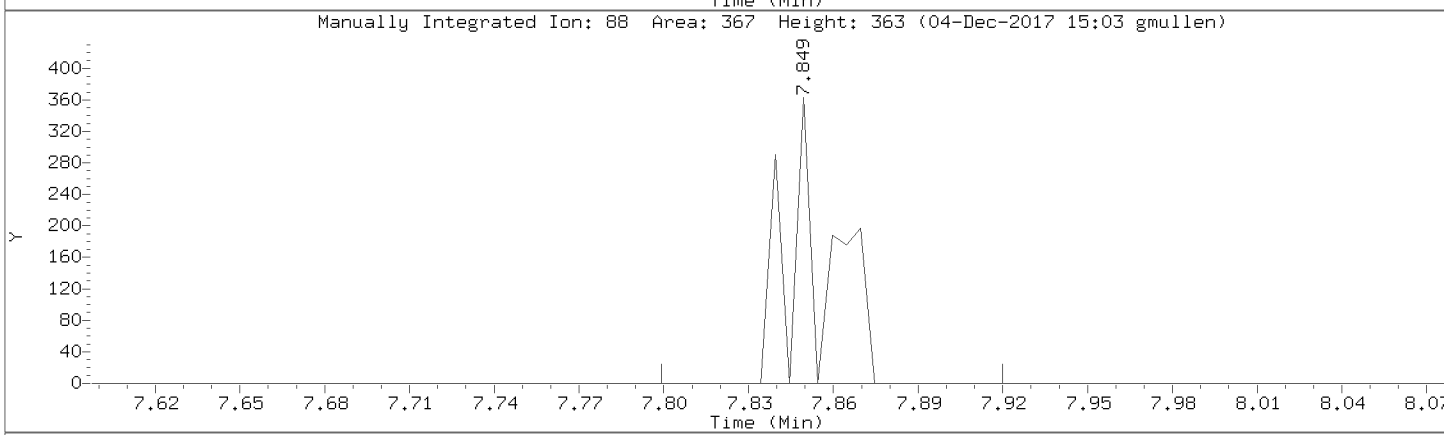
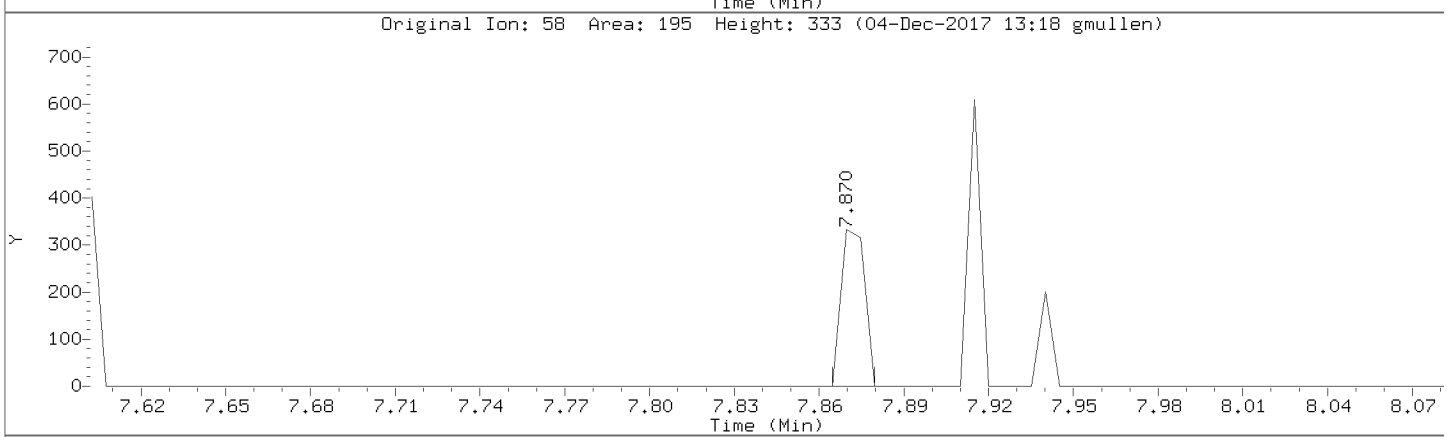
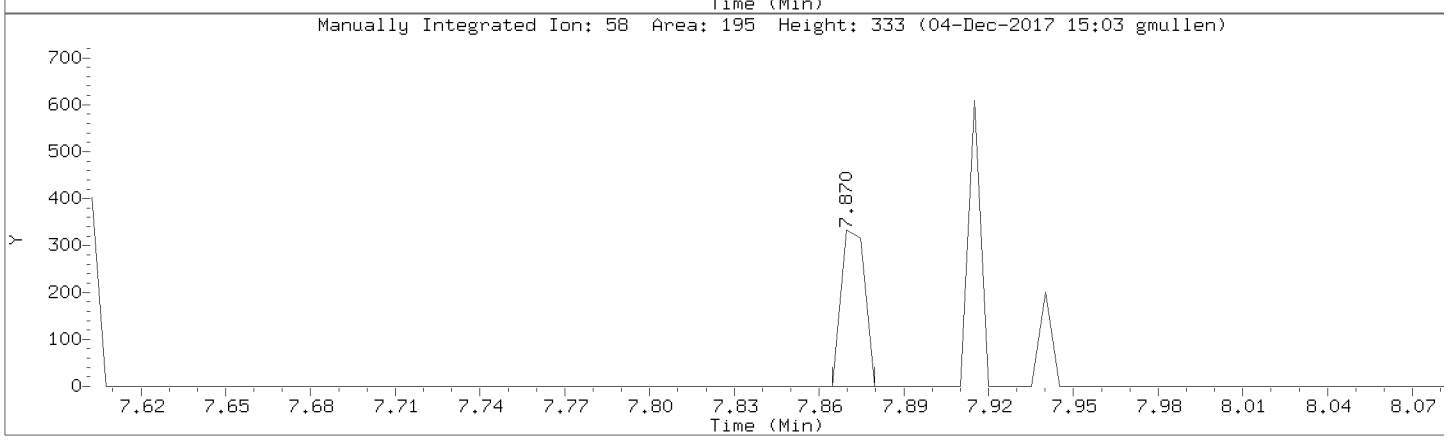
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: 1,4-Dioxane (p-Dioxane) Review Code: LT
CAS Number:









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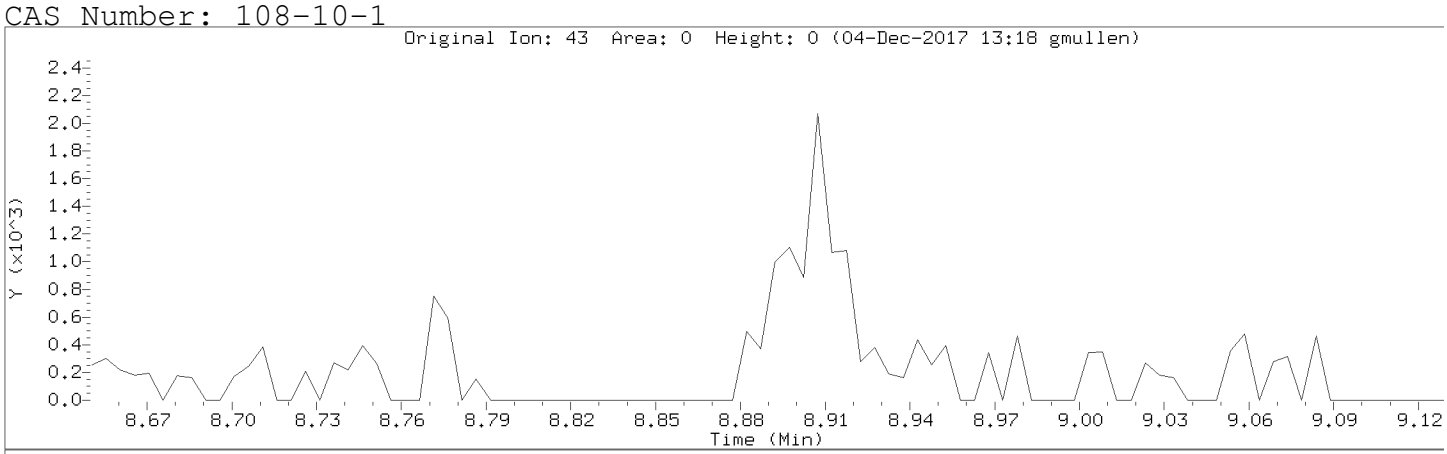
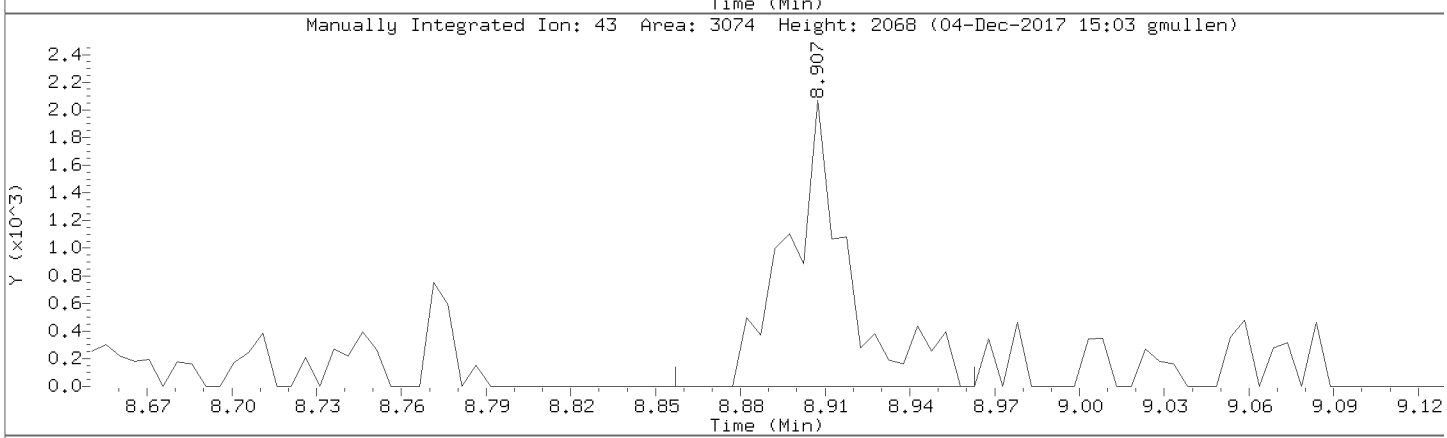
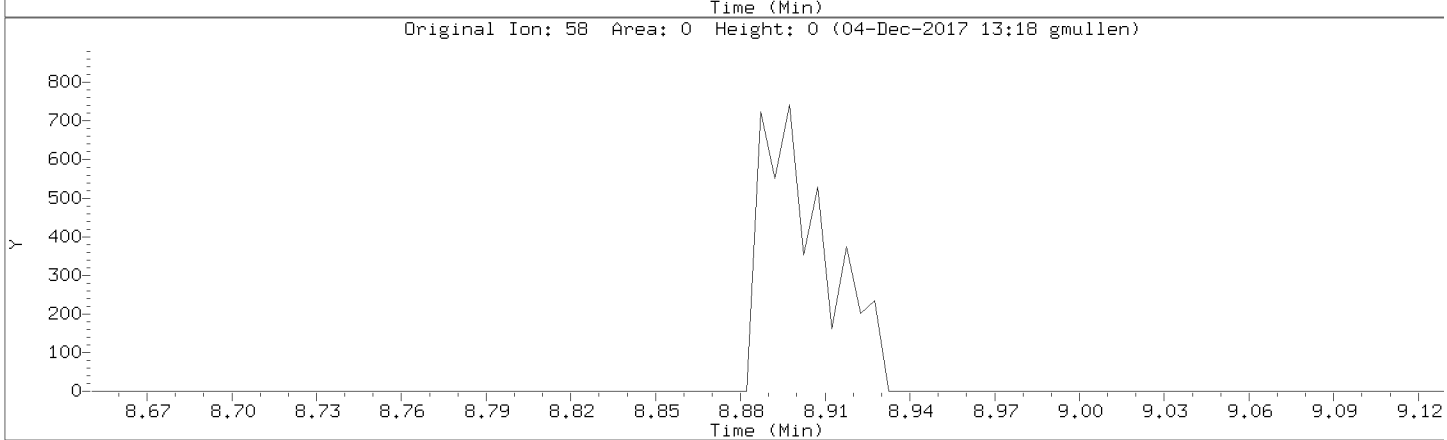
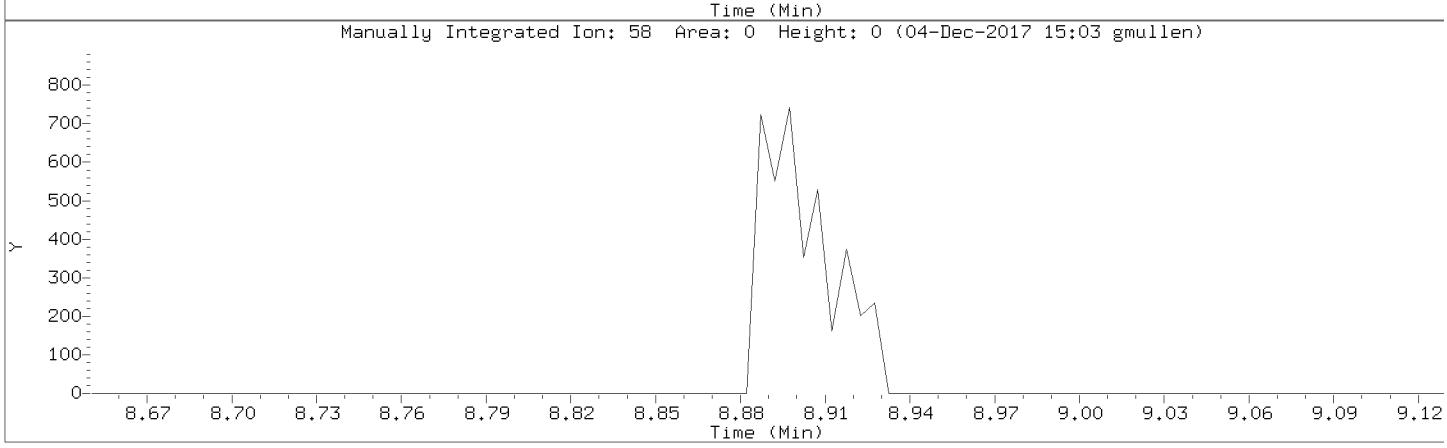
Lab Sample ID: CAL1

Compound: 4-Methyl-2-Pentanone Review Code: NI
CAS Number: 108-10-1









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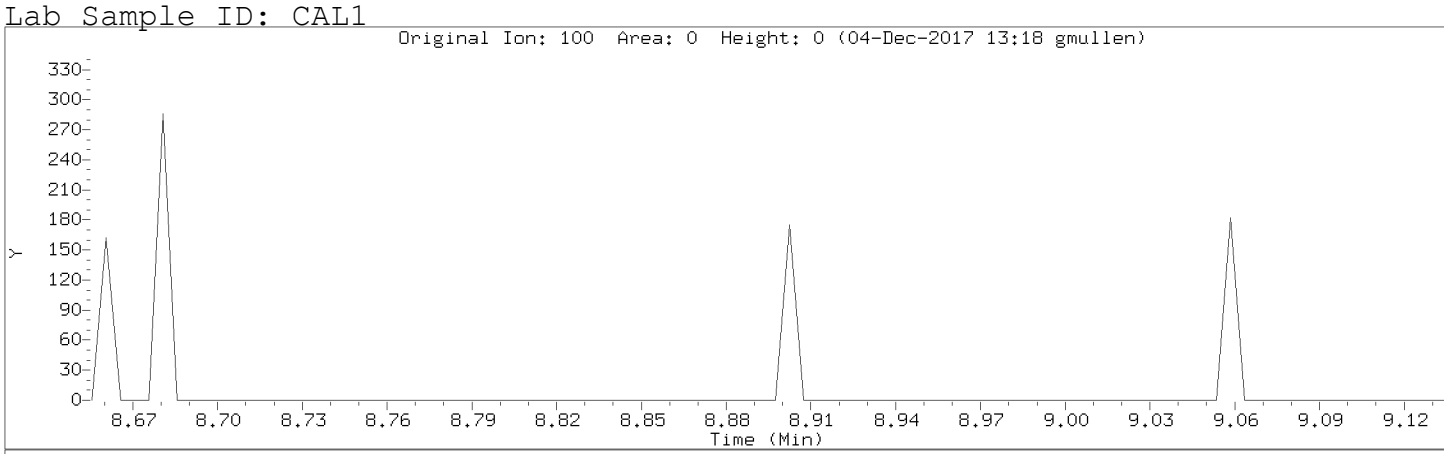
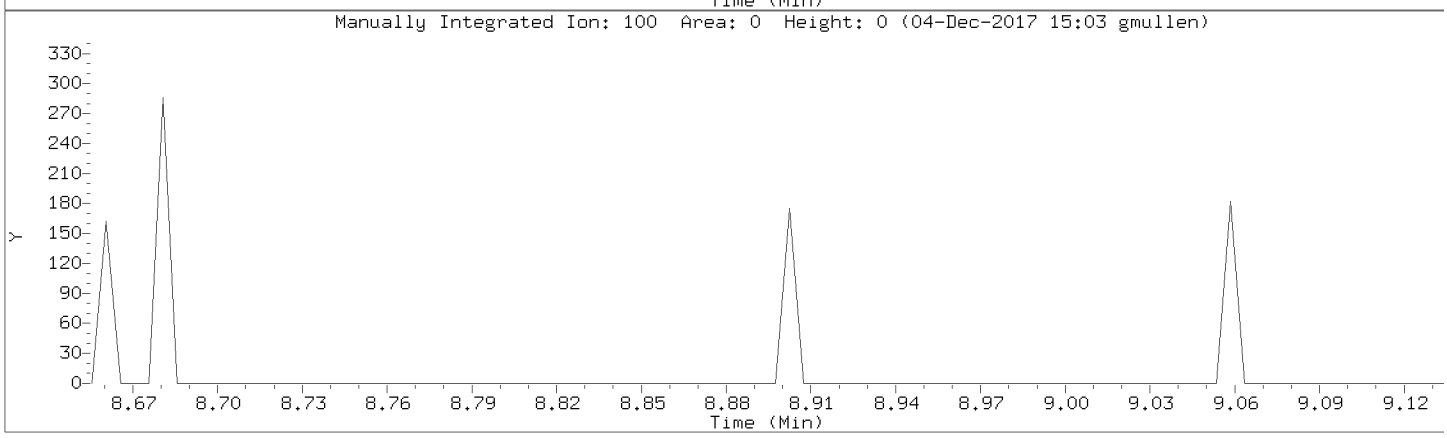
Lab Sample ID: CAL1





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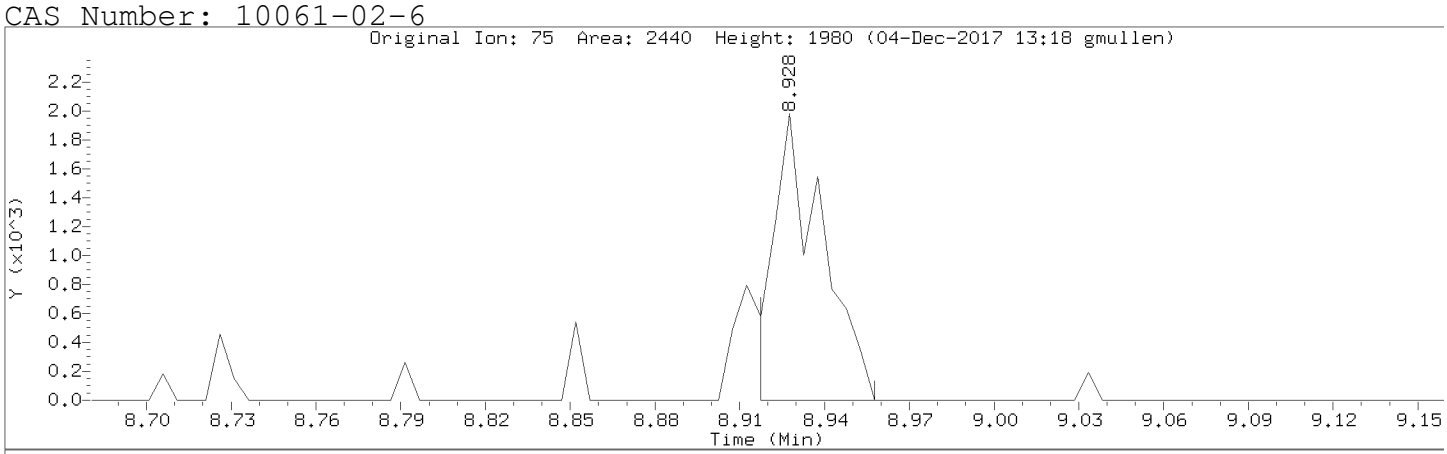
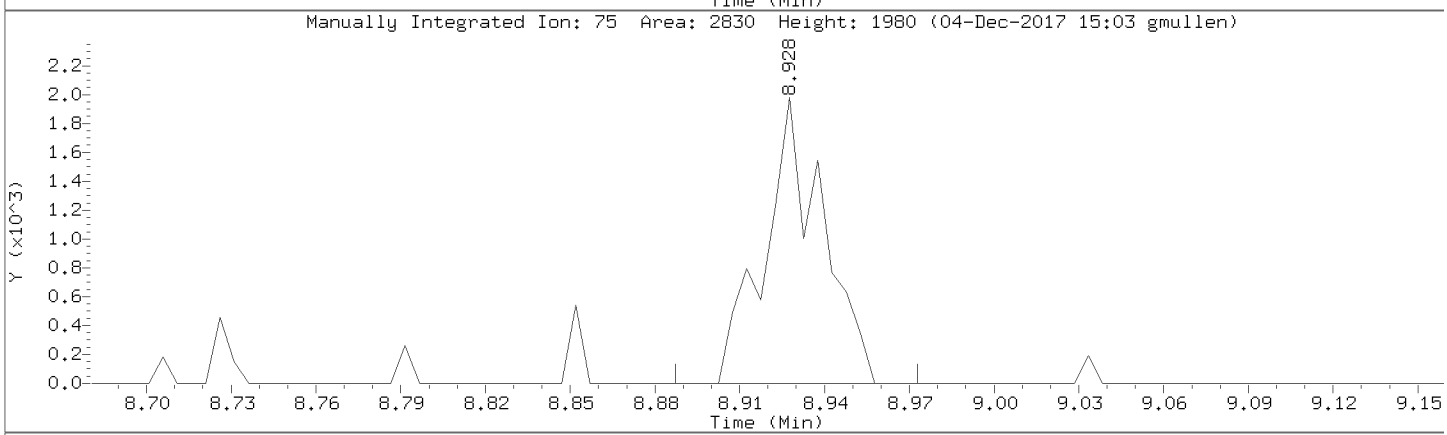
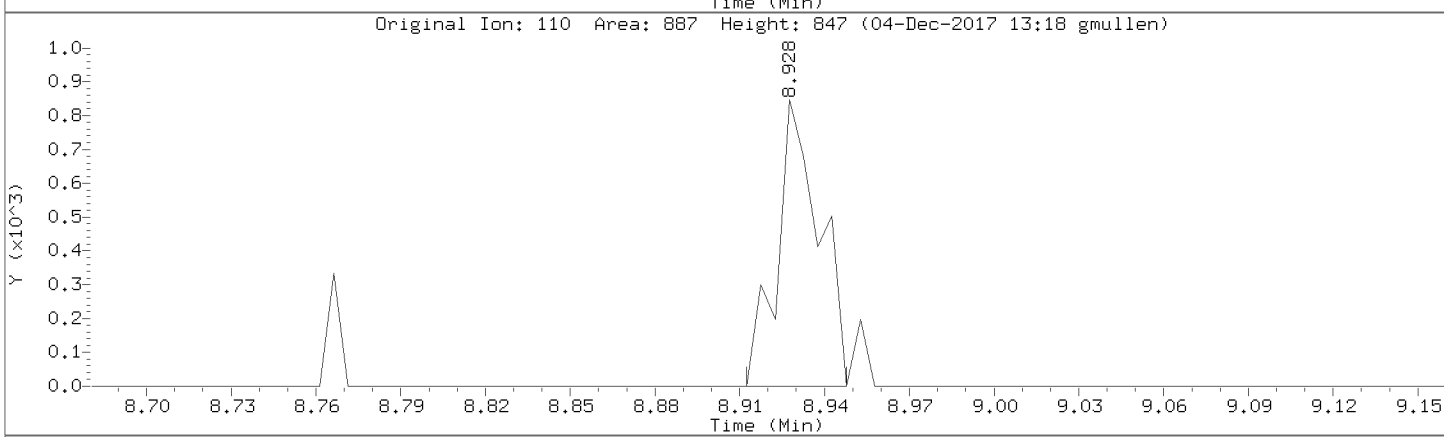
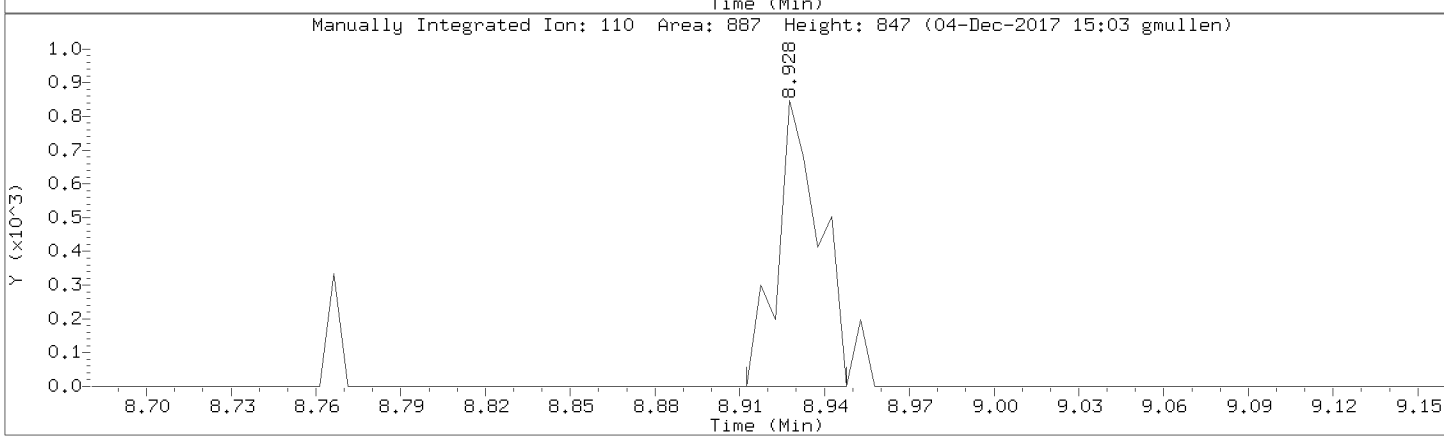
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: trans-1,3-Dichloropropene Review Code: LT
CAS Number: 10061-02-6









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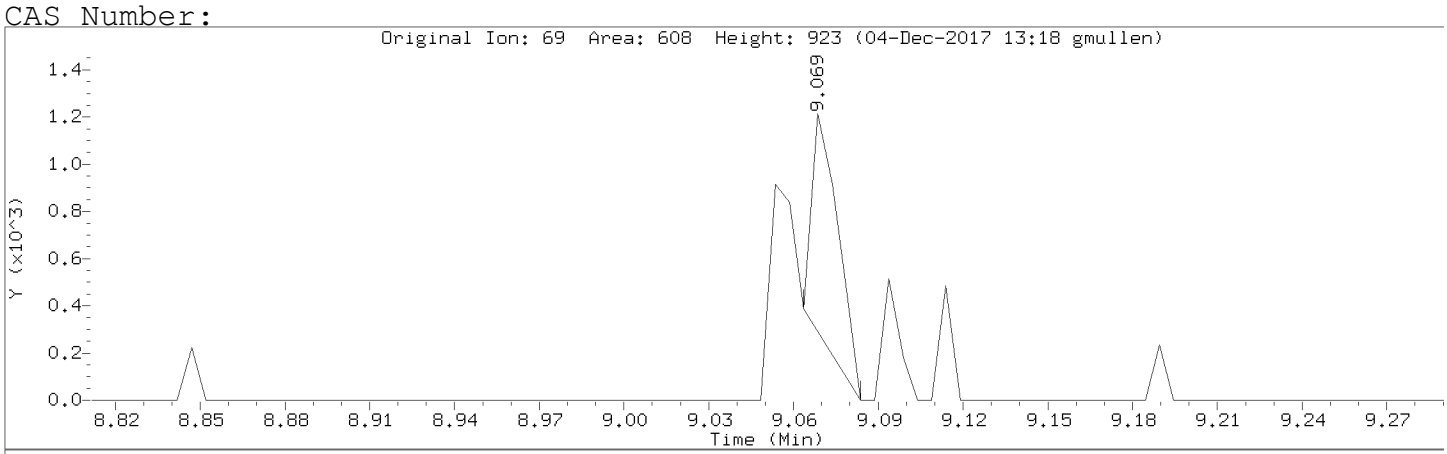
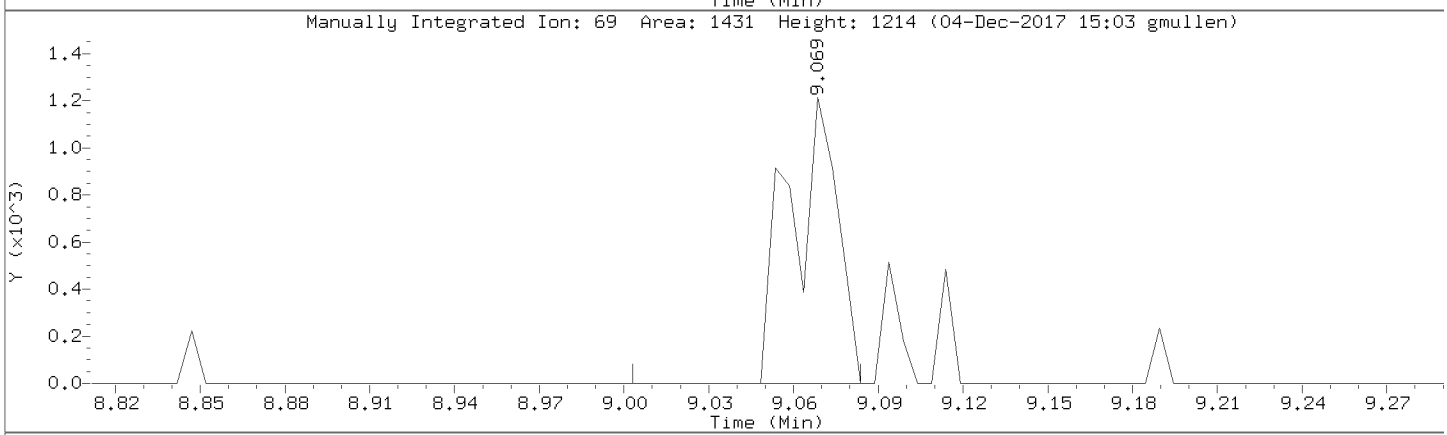
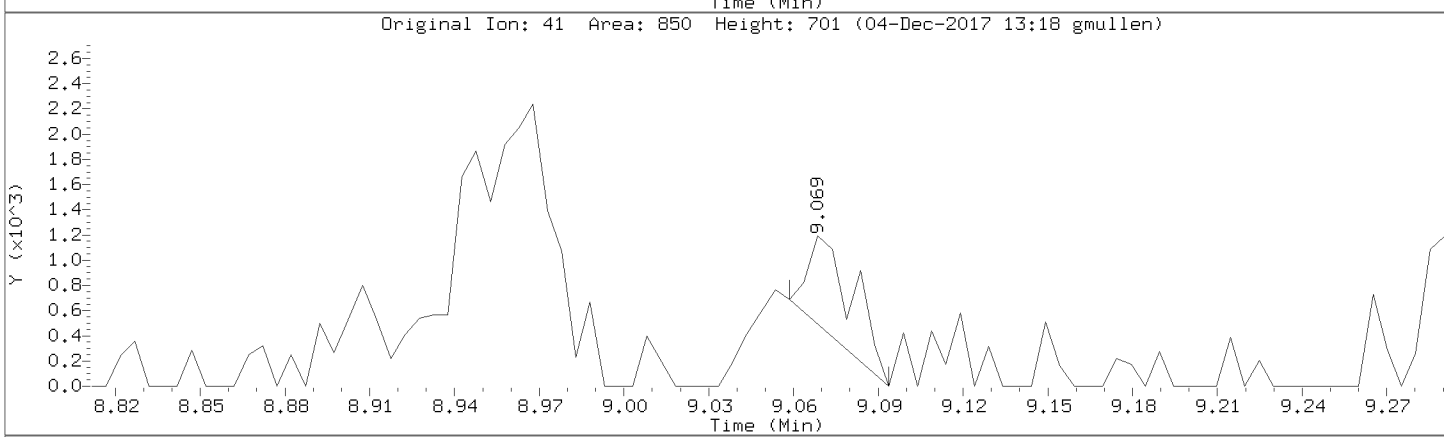
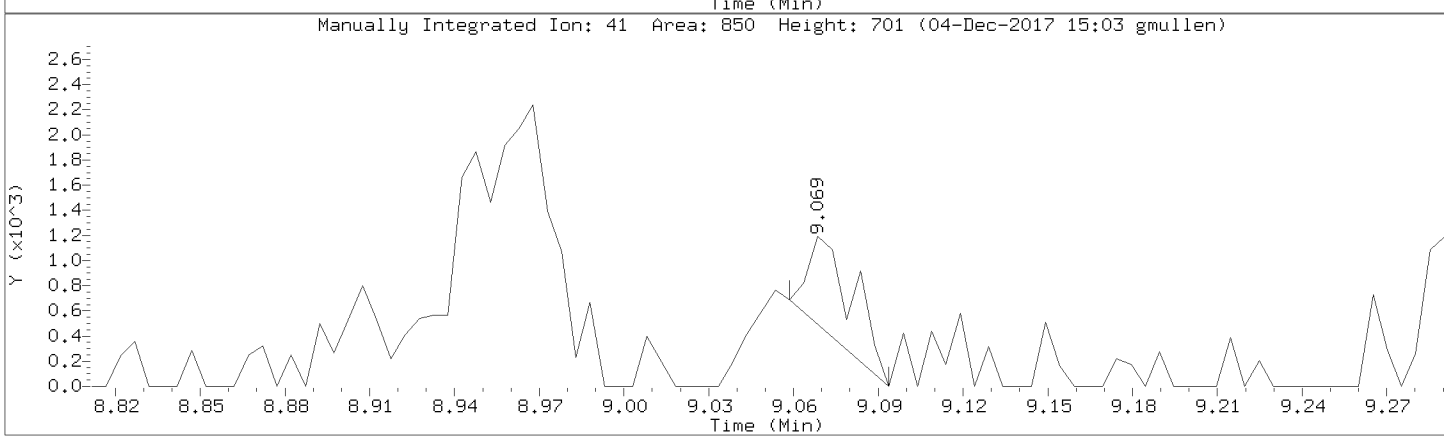
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Ethyl methacrylate Review Code: LT
CAS Number:









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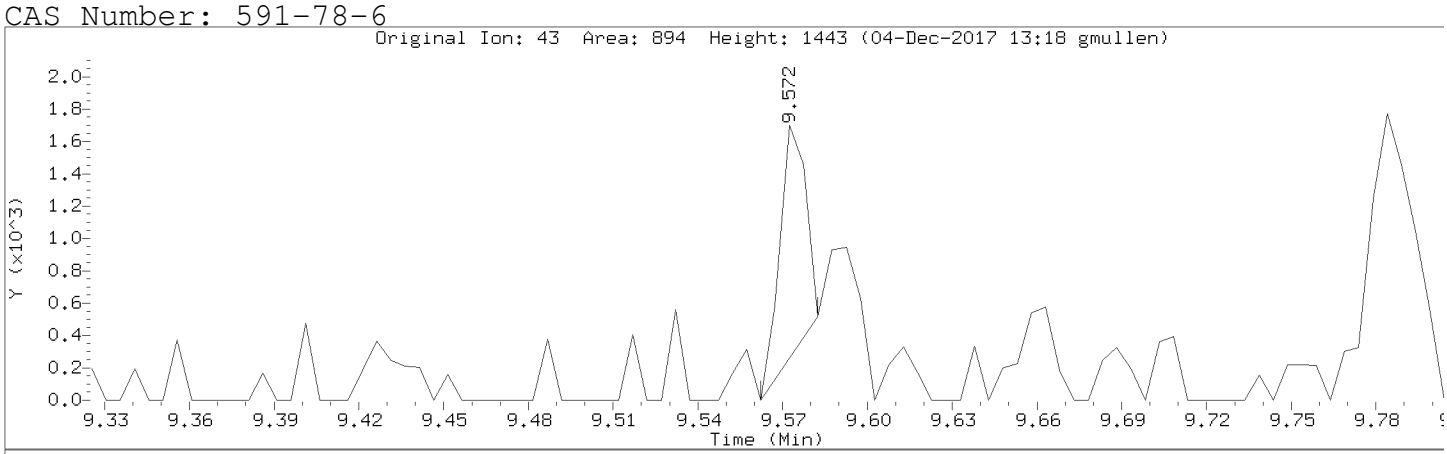
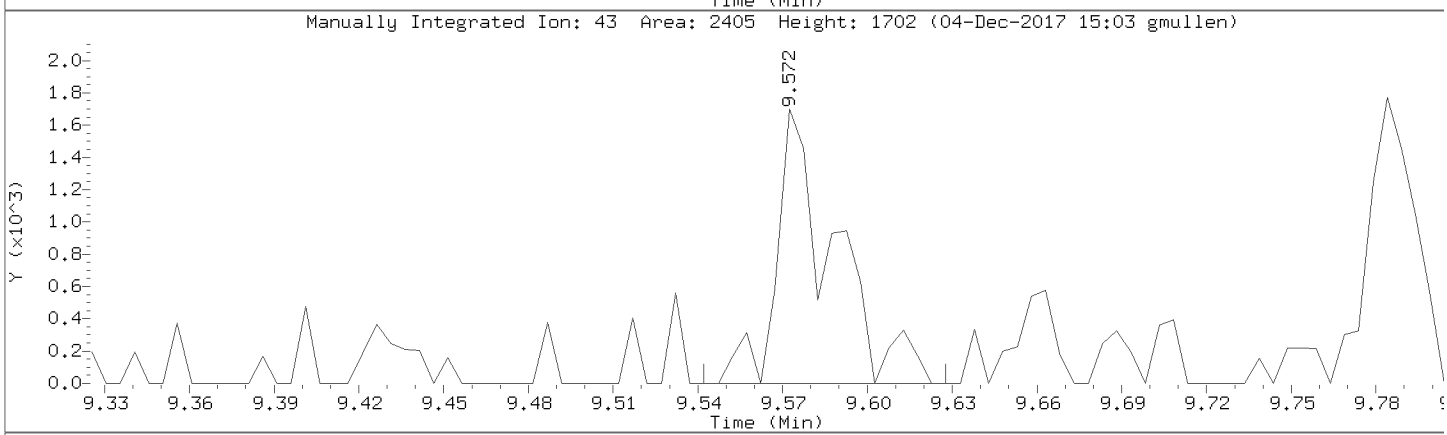
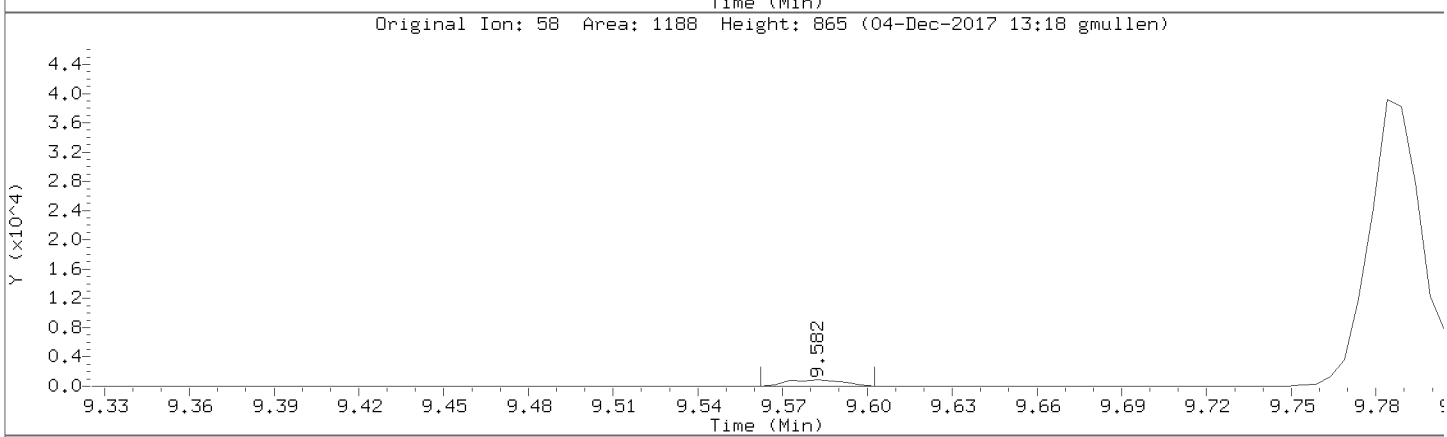
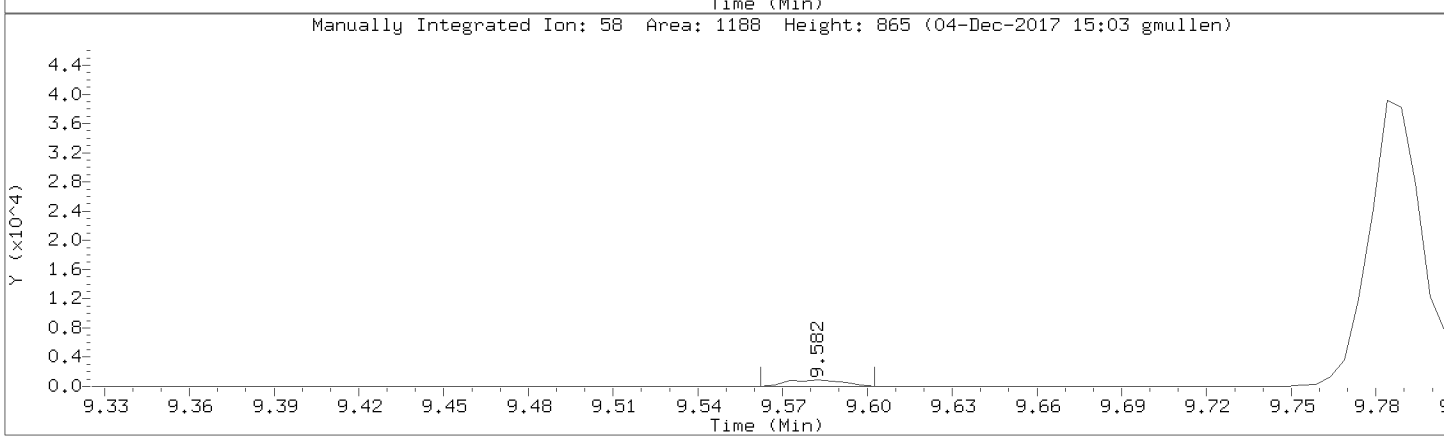
Lab Sample ID: CAL1

Compound: 2-Hexanone Review Code: LT
CAS Number: 591-78-6









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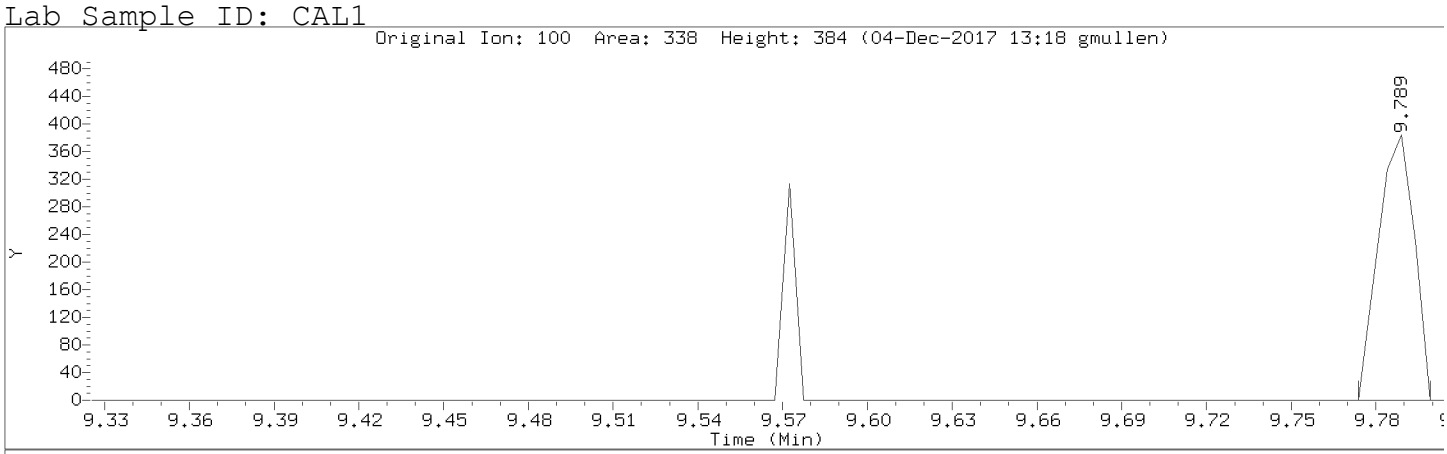

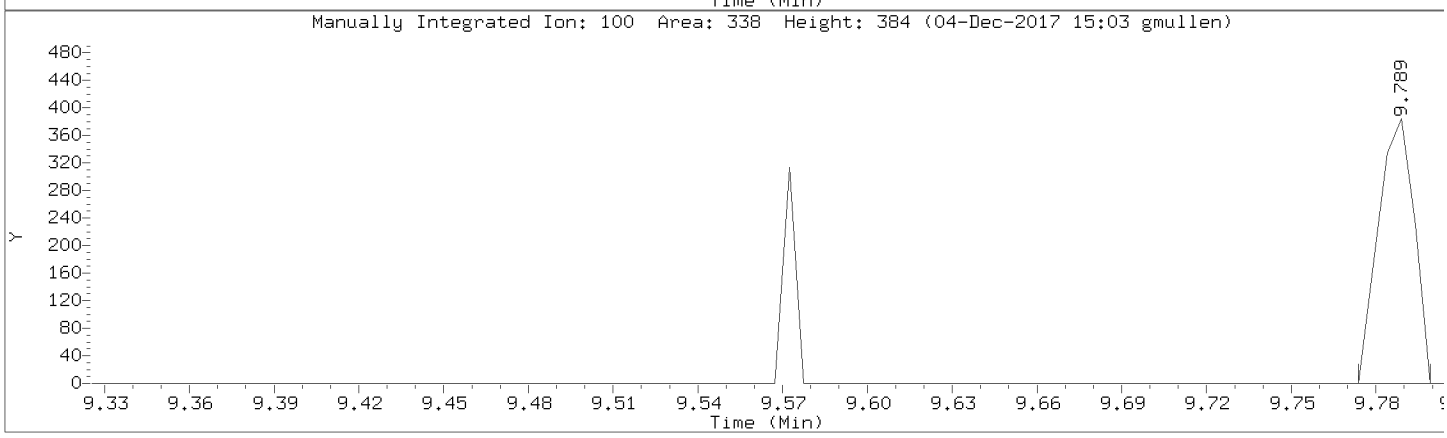

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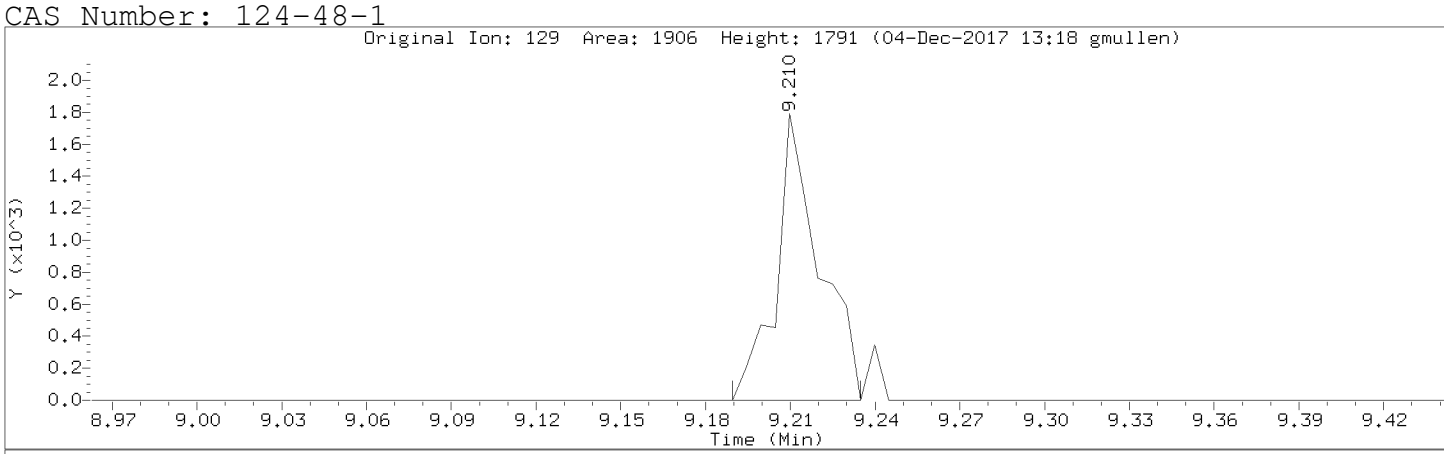
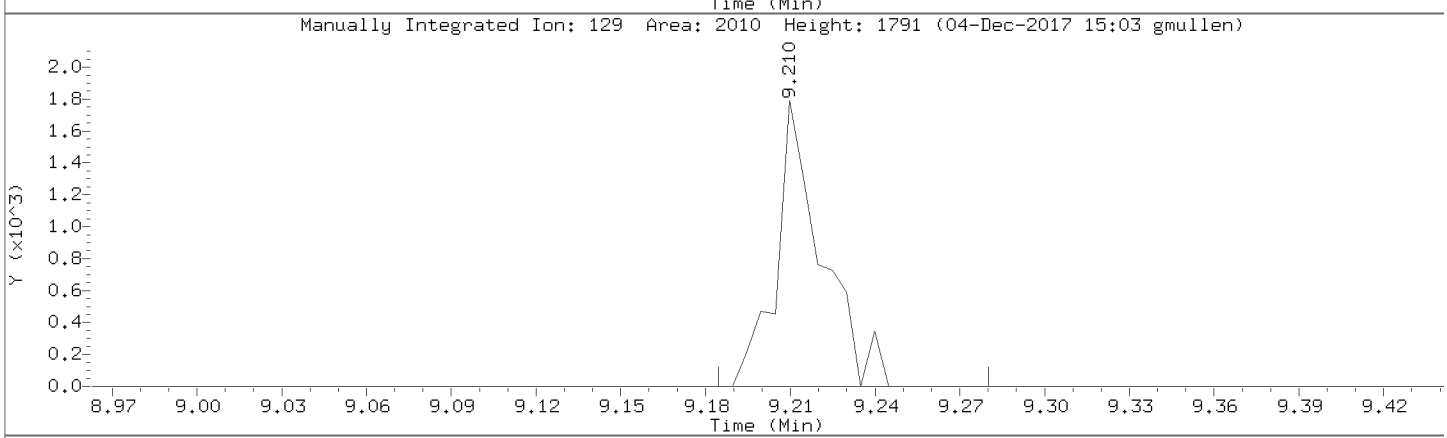
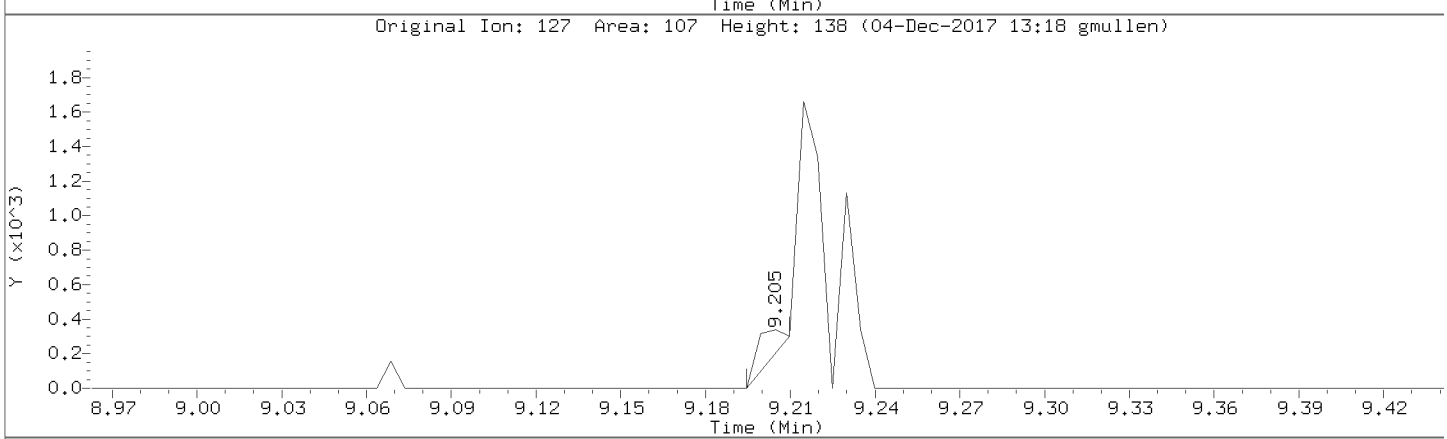
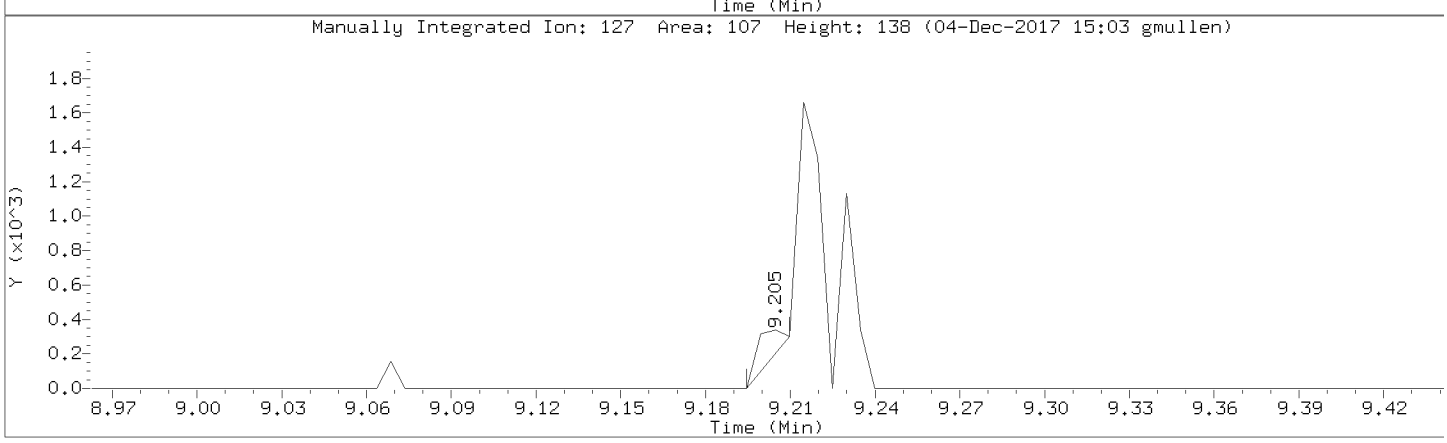
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Dibromochloromethane Review Code: LT
CAS Number: 124-48-1









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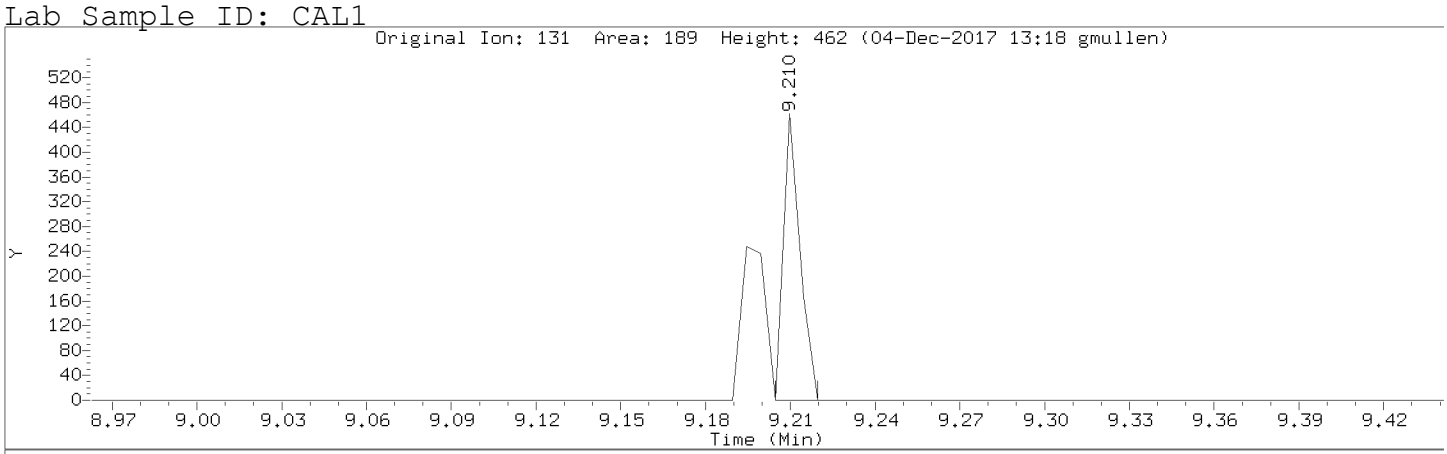

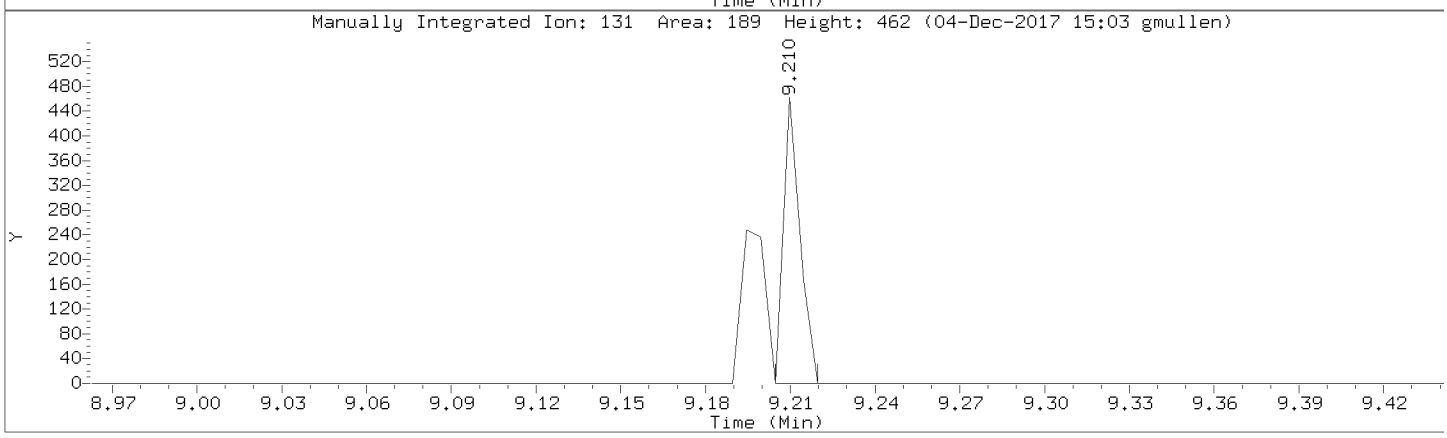

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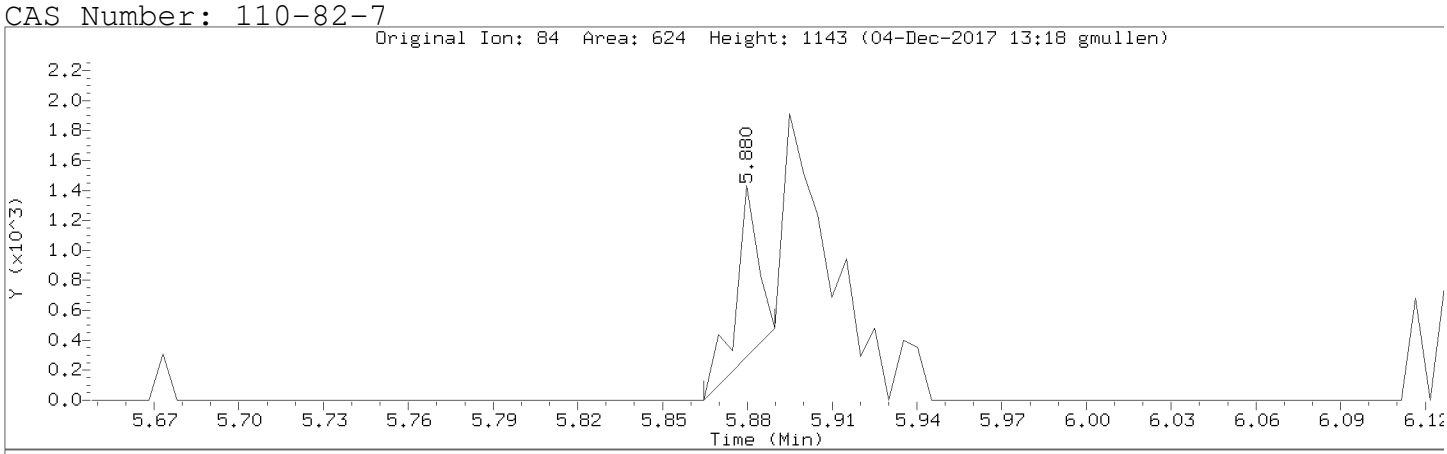
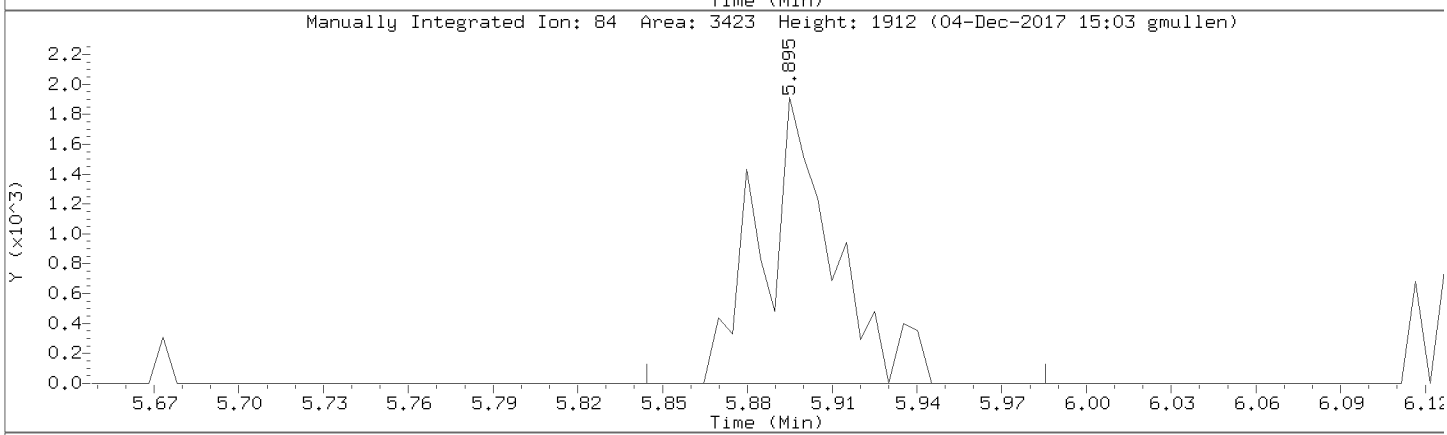
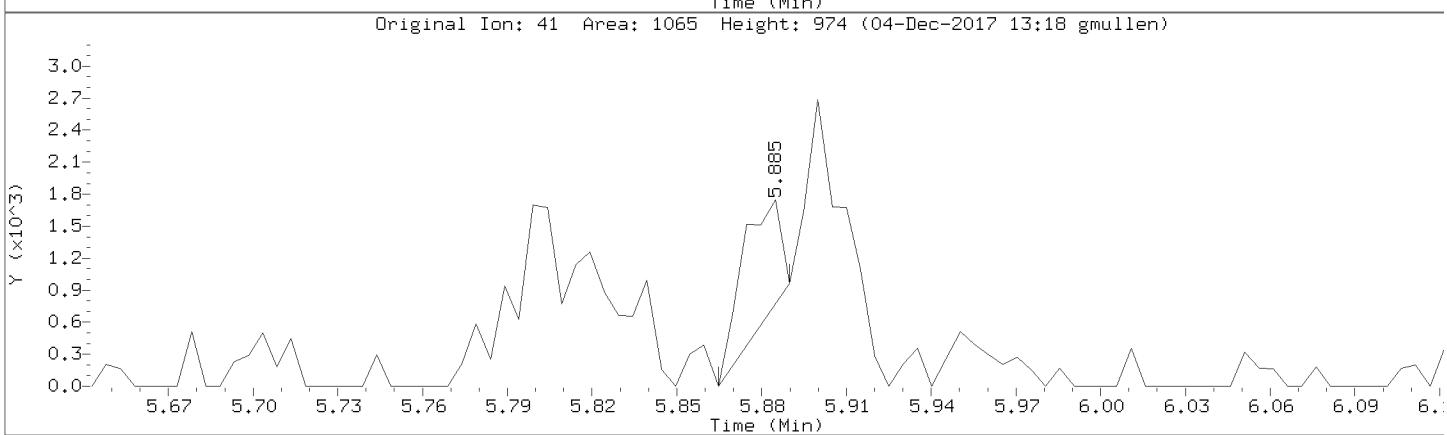
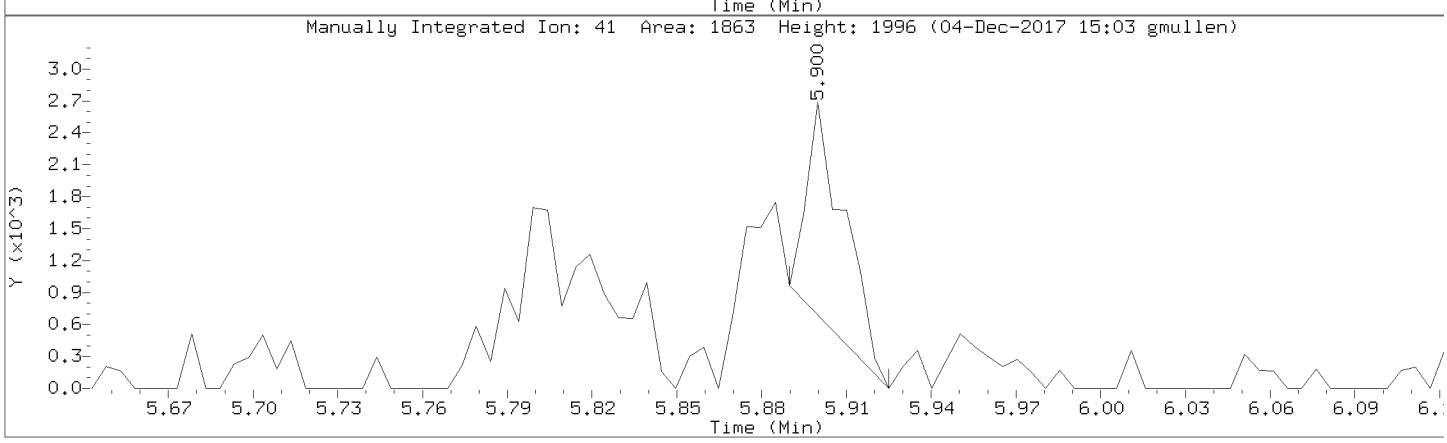
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Cyclohexane Review Code: LT
CAS Number: 110-82-7









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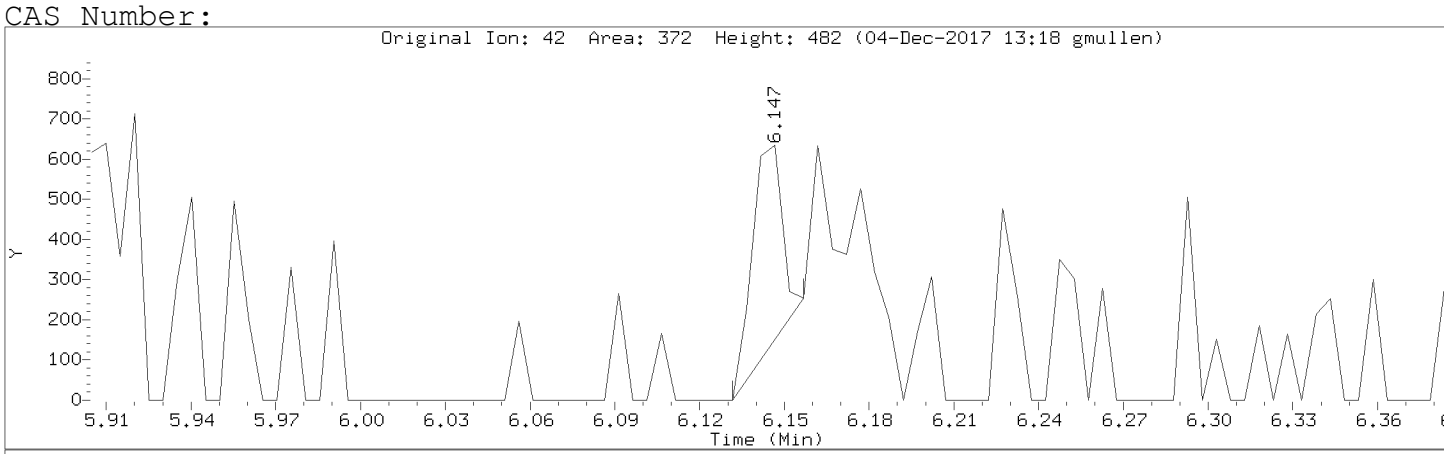
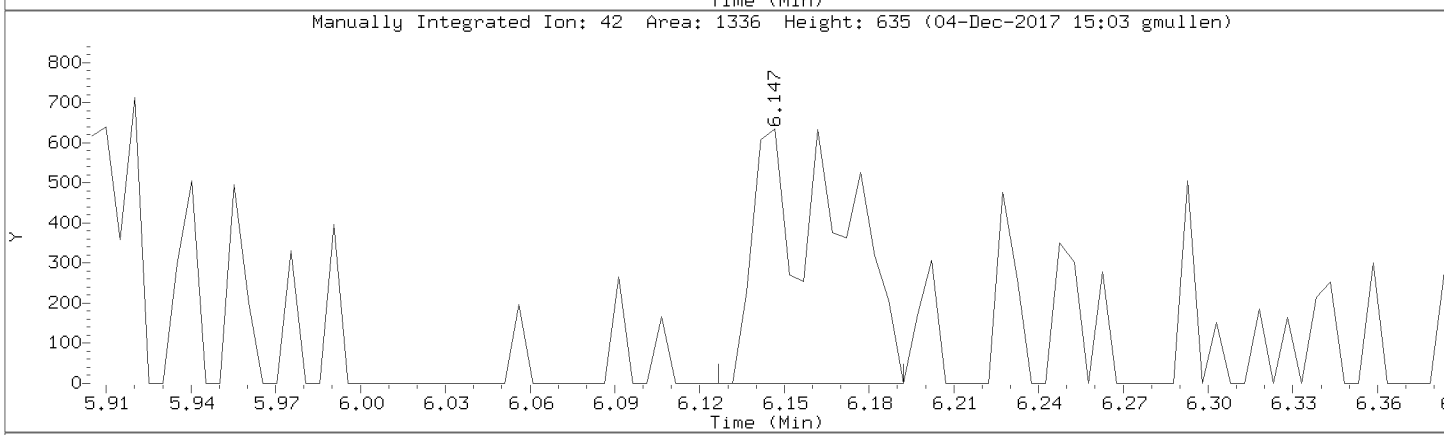
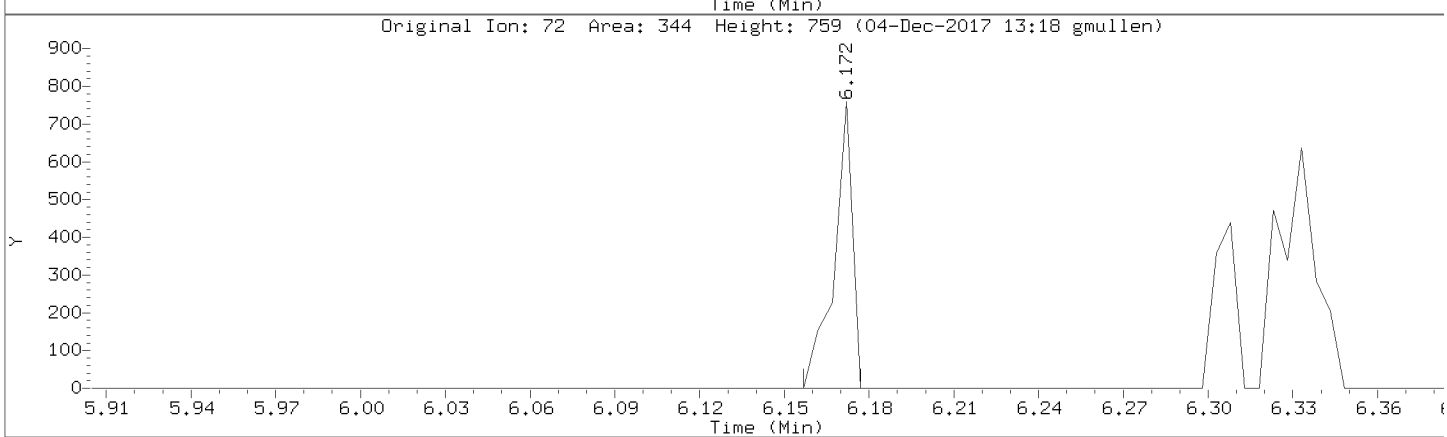
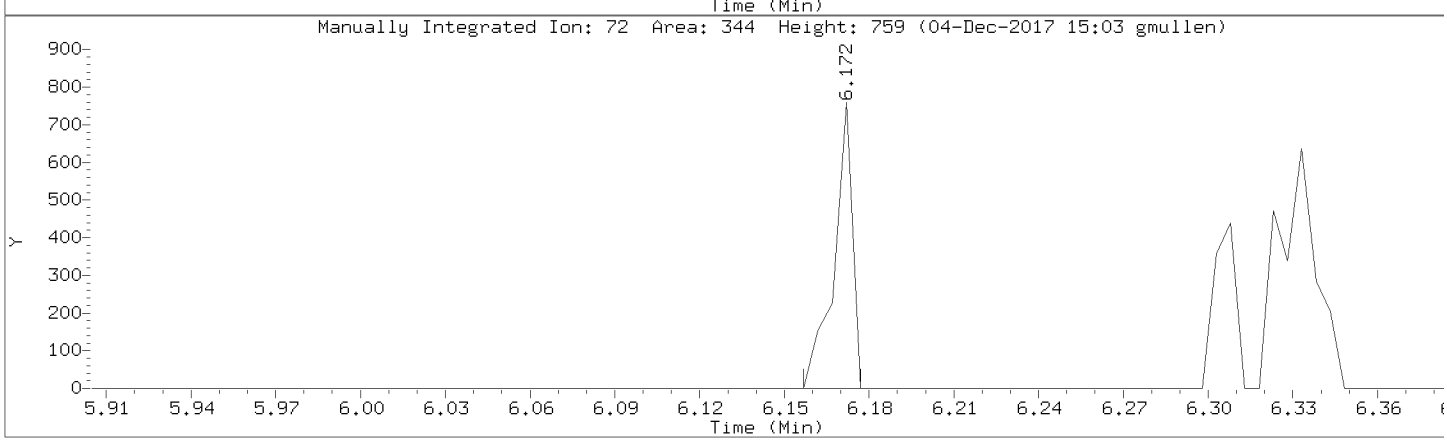
Lab Sample ID: CAL1

Compound: Tetrahydrofuran Review Code: LT
CAS Number:









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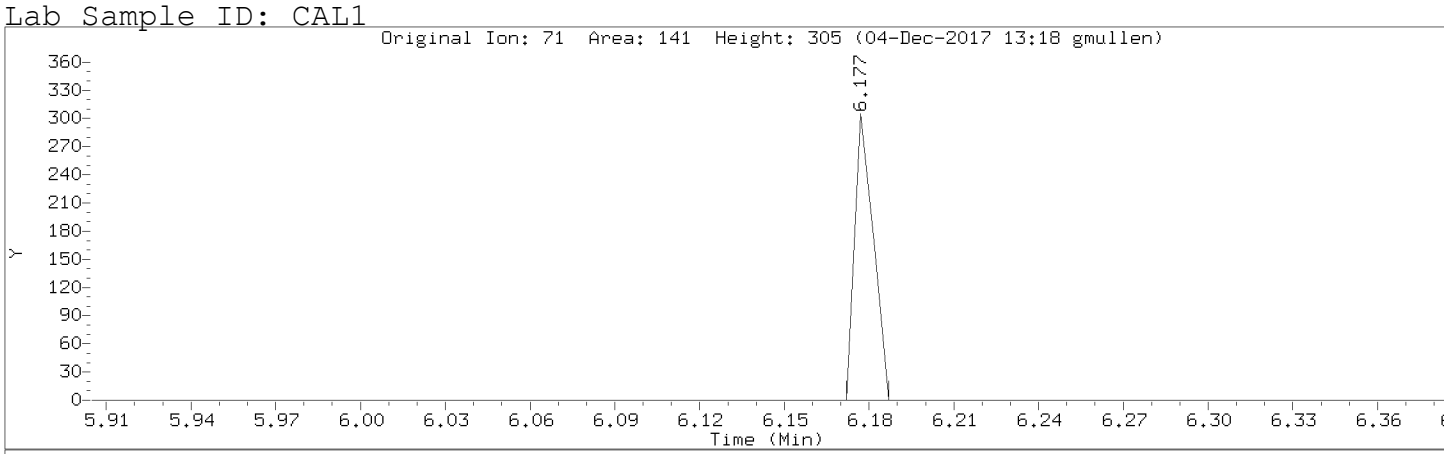
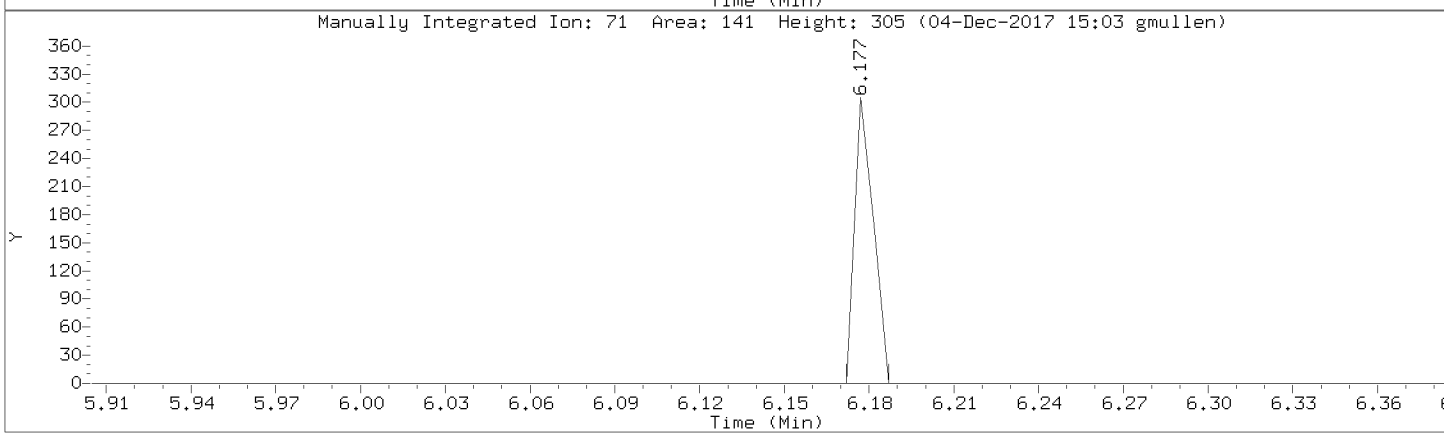
Lab Sample ID: CAL1





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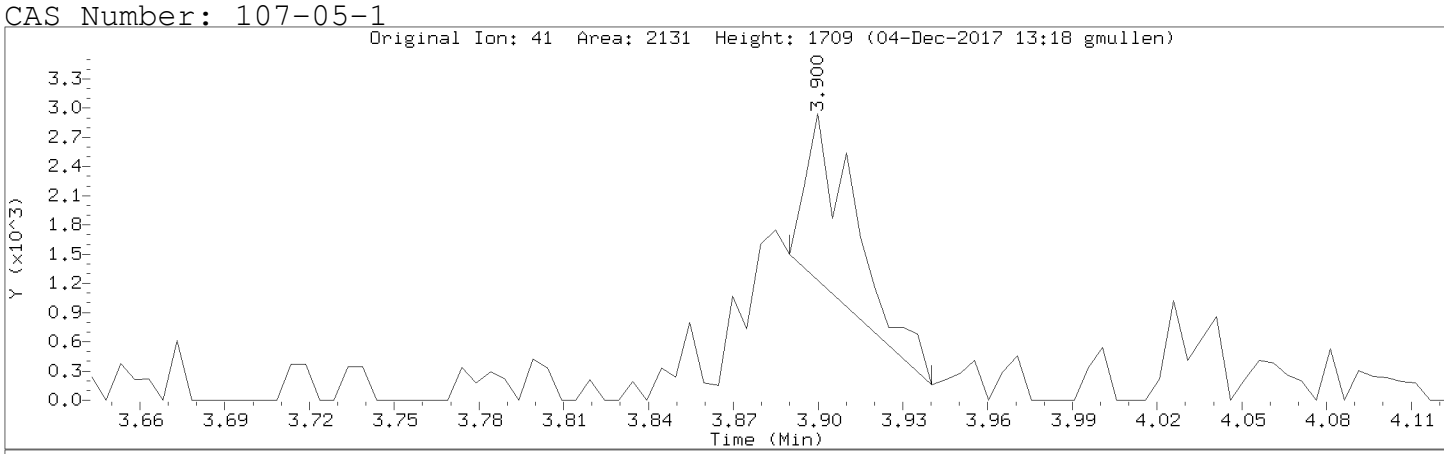
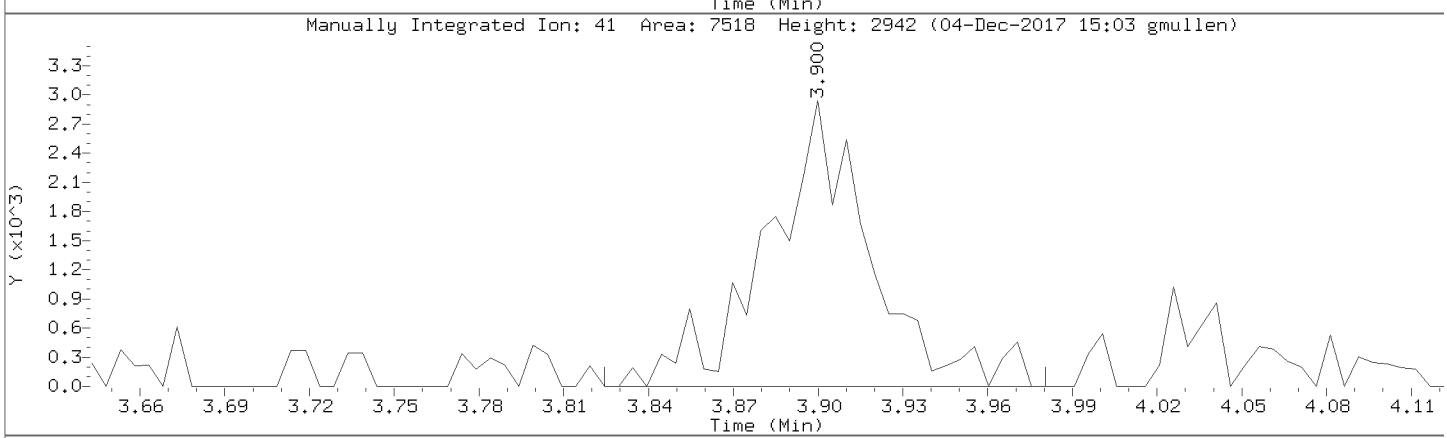
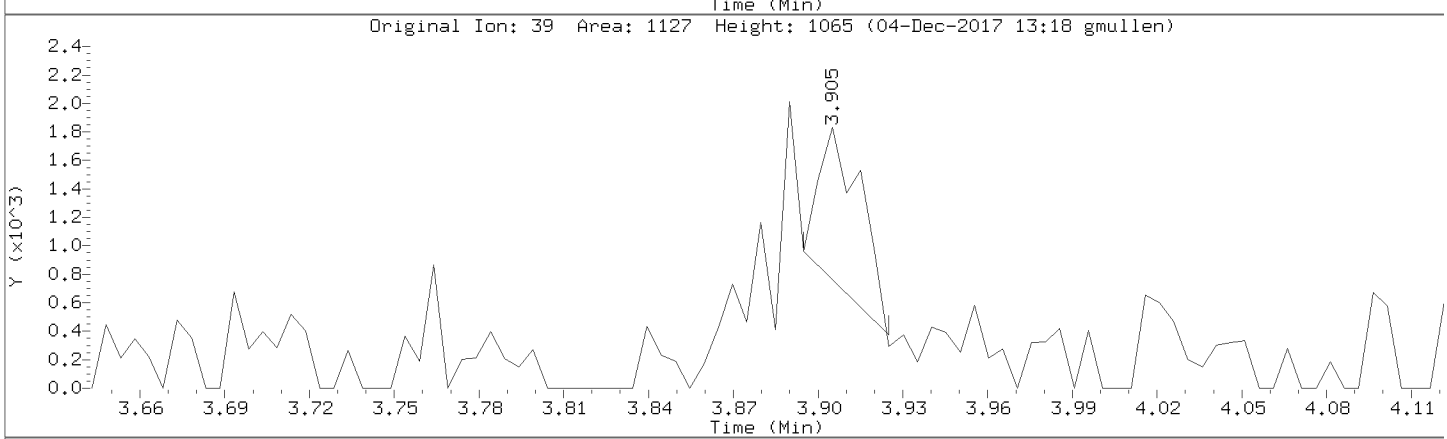
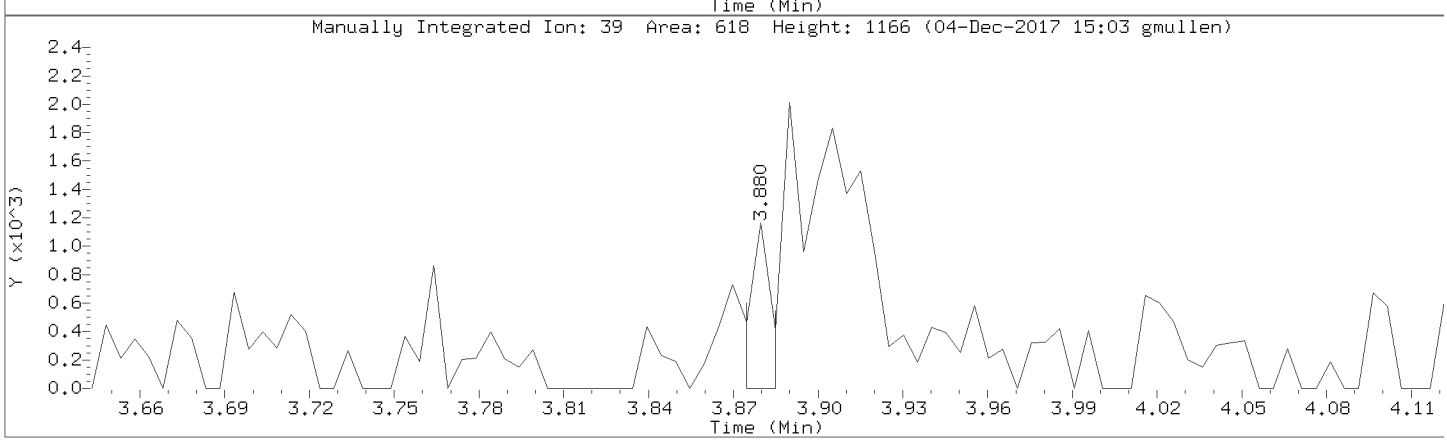
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Allyl chloride Review Code: LT
CAS Number: 107-05-1









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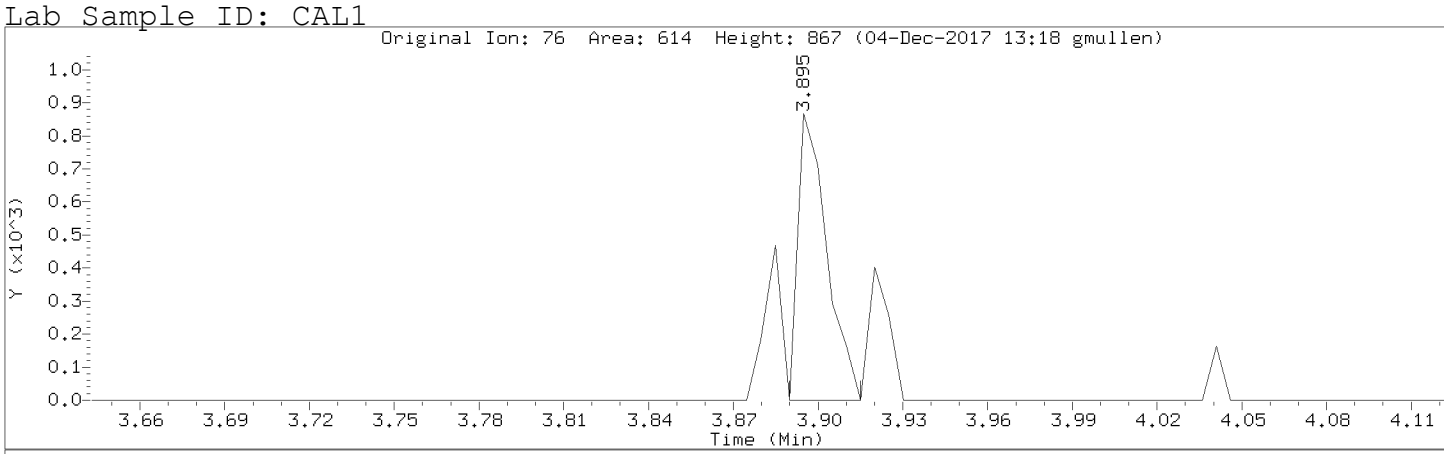

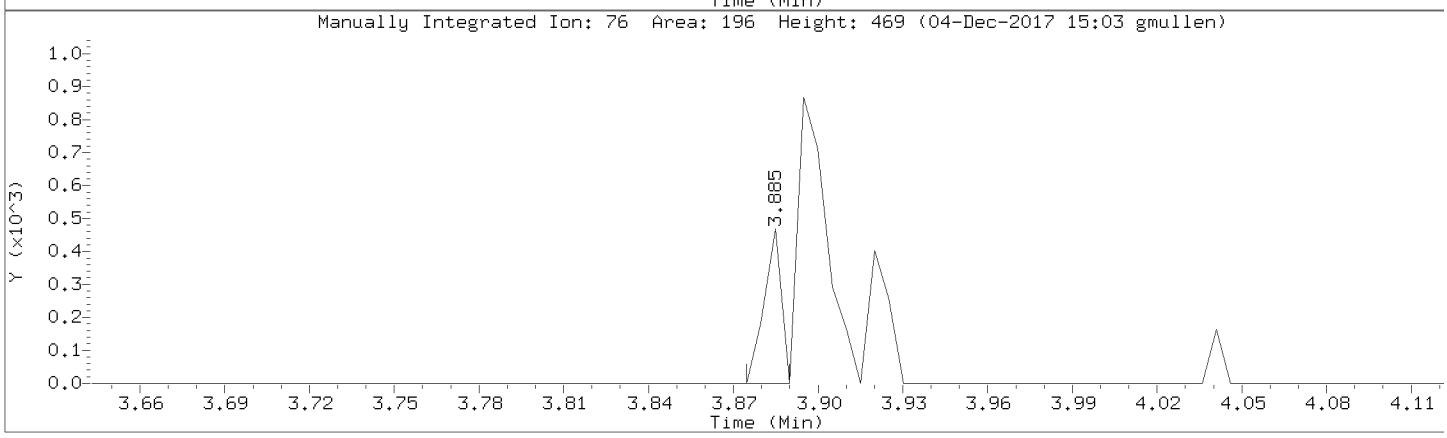

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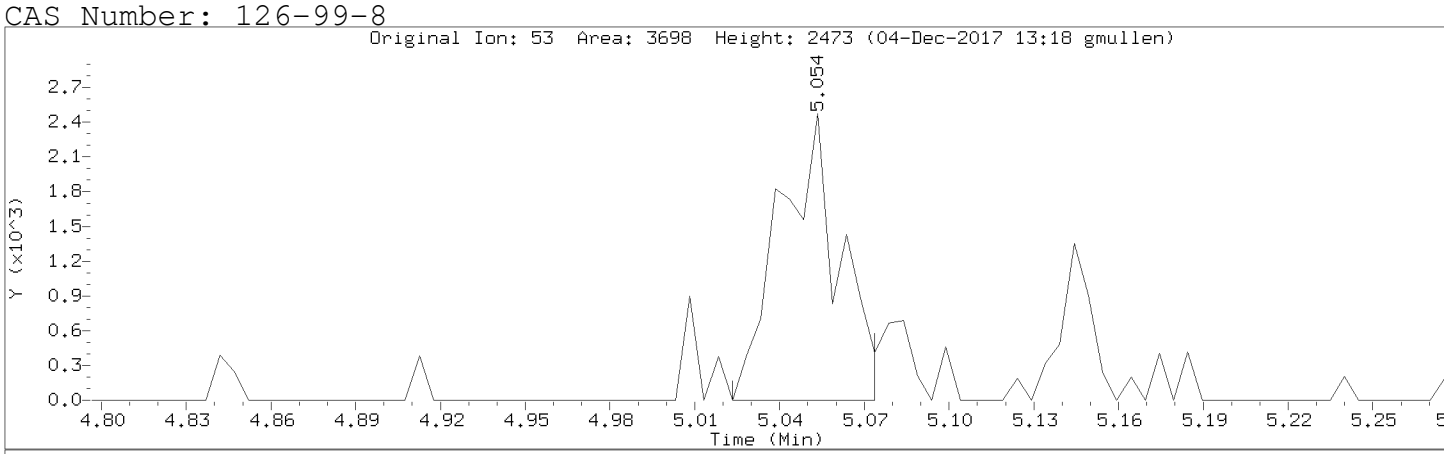
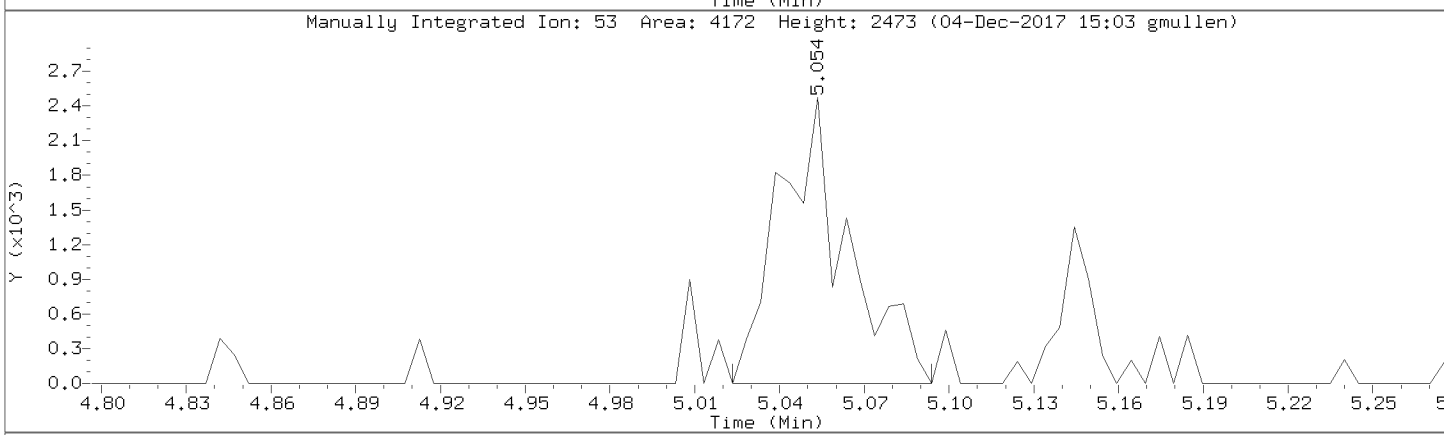
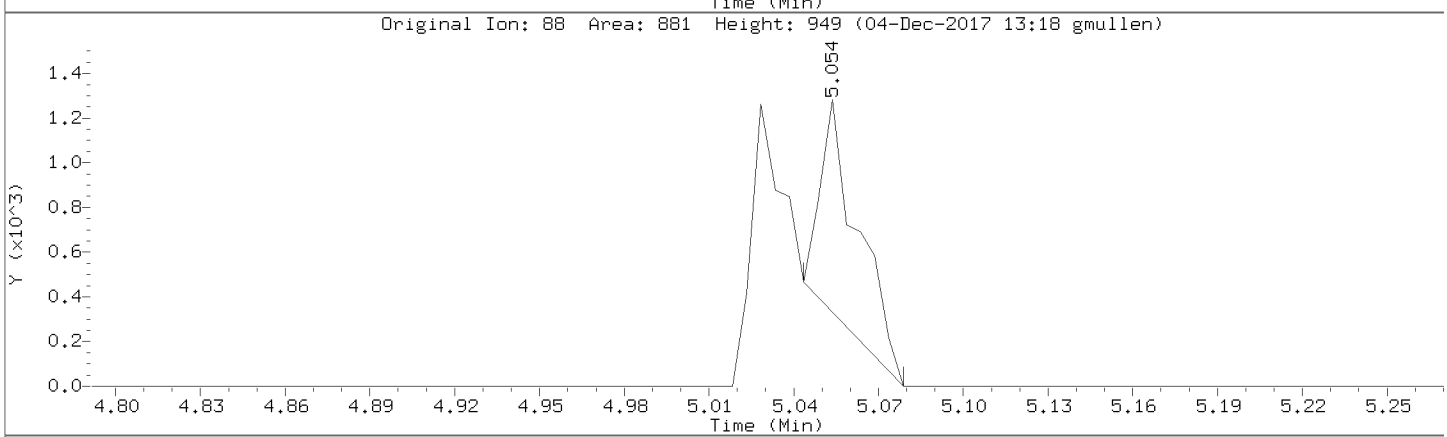
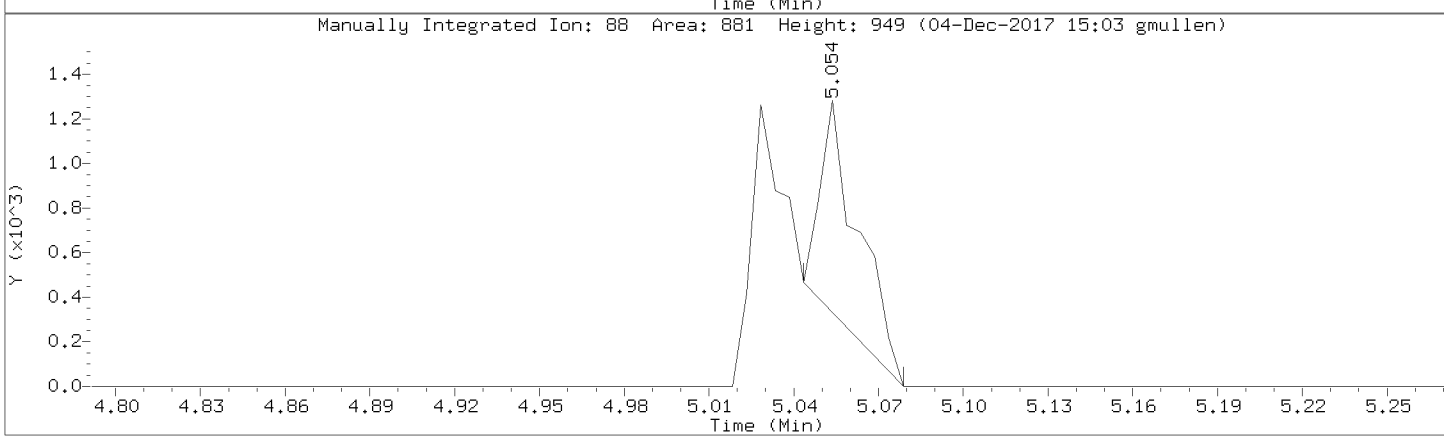
Injection Date: 04-DEC-2017 11:16
Instrument: 20msvd.i
Lab Sample ID: CAL1

Compound: Chloroprene Review Code: LT
CAS Number: 126-99-8









Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d10.d
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Inj Date : 04-DEC-2017 11:34
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal2,54928:1
Misc Info : 7846
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\120417.b\d120417sim.m
Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 11:34 Cal File: 1204d10.d
Als bottle: 10 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.713	1.703	(0.258)	8394	1.00000	1.00(M)
2 Chloromethane	50	1.894	1.894	(0.285)	13911	1.00000	0.991
3 Vinyl chloride	62	1.990	1.990	(0.299)	13852	1.00000	1.04
4 Bromomethane	94	2.338	2.338	(0.352)	6472	1.00000	1.09
5 Chloroethane	64	2.504	2.484	(0.377)	5803	1.00000	0.987(H)
6 Trichlorofluoromethane	101	2.640	2.640	(0.397)	10517	1.00000	0.984(H)
7 1,1-Dichloroethene	96	3.254	3.250	(0.489)	5684	1.00000	0.945
8 Carbon disulfide	76	3.275	3.275	(0.492)	19493	1.00000	0.955
9 1,1,2-Trichlorotrifluoroethane	101	3.315	3.325	(0.499)	5560	1.00000	0.792(M)
10 Iodomethane	142	3.421	3.431	(0.514)	11824	1.00000	0.892
11 Acrolein	56	3.718	3.713	(0.559)	1025	1.00000	1.61(M)
12 Allyl chloride	41	3.899	3.894	(0.586)	12758	1.00000	0.887(M)
13 Methylene Chloride	84	4.050	4.046	(0.609)	9697	1.00000	1.49
14 Acetone	43	4.166	4.151	(0.627)	3657	1.00000	1.96(M)
15 trans-1,2-Dichloroethene	96	4.272	4.277	(0.642)	6014	1.00000	0.888(M)
16 Methyl Acetate	74	4.333	4.323	(0.652)	1006	1.00000	1.33(M)
17 n-Hexane	57	4.388	4.393	(0.660)	13254	1.00000	0.922(M)
18 Methyl-tert-butyl ether	73	4.459	4.449	(0.670)	12478	1.00000	0.946
19 Acetonitrile	41	4.771	4.766	(0.717)	8314	10.0000	9.59
20 Chloroprene	53	5.058	5.048	(0.761)	12208	1.00000	0.844
21 1,1-Dichloroethane	63	5.078	5.073	(0.764)	13514	1.00000	0.856(M)
22 Acrylonitrile	53	5.164	5.154	(0.777)	2800	1.00000	1.03(M)

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.401	5.396	(0.812)	33773	1.00000	0.940
	24 cis-1,2-Dichloroethene	96	5.703	5.688	(0.858)	6986	1.00000	0.902
	25 2,2-Dichloropropane	77	5.804	5.809	(0.873)	8038	1.00000	0.981(M)
	26 Cyclohexane	84	5.899	5.899	(0.887)	7765	1.00000	0.838(M)
	27 Bromochloromethane	128	5.904	5.899	(0.888)	3151	1.00000	0.857(M)
	28 Chloroform	83	5.985	5.985	(0.900)	9550	1.00000	0.816
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	7698	1.00000	0.848
	30 Tetrahydrofuran	42	6.171	6.156	(0.928)	2390	1.00000	1.36(M)
	31 1,1,1-Trichloroethane	97	6.197	6.192	(0.932)	9069	1.00000	0.873(M)
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	388884	50.0000	49.1
	33 1,1-Dichloropropene	75	6.317	6.312	(0.884)	8179	1.00000	0.877
	34 2-Butanone (MEK)	43	6.327	6.312	(0.952)	3996	1.00000	1.25
	35 Benzene	78	6.559	6.559	(0.918)	25684	1.00000	0.988
	36 Propionitrile	54	6.605	6.600	(0.993)	9177	10.0000	9.71
	37 Methacrylonitrile	41	6.625	6.620	(0.996)	39075	10.0000	8.80
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	359865	50.0000	
	39 1,2-Dichloroethane	62	6.761	6.756	(0.946)	9957	1.00000	1.03
	40 Isobutanol	43	6.801	6.791	(1.023)	4933	21.0000	18.7
	41 Methylcyclohexane	83	7.098	7.093	(0.994)	7483	1.00000	0.758
	42 Trichloroethene	130	7.103	7.108	(0.994)	7452	1.00000	0.944
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1146352	50.0000	
	44 Dibromomethane	93	7.491	7.496	(1.049)	4051	1.00000	0.998(M)
	45 1,2-Dichloropropane	63	7.587	7.592	(1.062)	9045	1.00000	1.02
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	8279	1.00000	0.997
	47 Methyl methacrylate	41	7.804	7.804	(1.092)	11936	2.00000	1.84
	48 1,4-Dioxane (p-Dioxane)	88	7.859	7.849	(1.100)	667	20.0000	16.6(M)
	49 2-Chloroethyl vinyl ether	63	8.237	8.222	(1.153)	8621	2.00000	1.95(M)
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	8366	1.00000	0.872(M)
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1299747	50.0000	50.7
	52 Toluene	91	8.544	8.539	(1.196)	26035	1.00000	0.958
	53 Tetrachloroethene	164	8.907	8.902	(0.910)	6023	1.00000	0.859
	54 4-Methyl-2-Pentanone	43	8.907	8.902	(0.910)	5844	1.00000	0.890
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	7759	1.00000	0.969
	56 Ethyl methacrylate	69	9.068	9.063	(1.269)	4400	1.00000	0.818
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	5190	1.00000	1.04
	58 Dibromochloromethane	129	9.209	9.214	(0.941)	3681	1.00000	0.653(M)
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	7394	1.00000	0.906
	60 1,2-Dibromoethane (EDB)	107	9.406	9.411	(1.317)	4919	1.00000	0.932
	61 2-Hexanone	43	9.577	9.577	(0.978)	4759	1.00000	1.05(M)
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	528814	50.0000	
	63 Chlorobenzene	112	9.804	9.799	(1.002)	16998	1.00000	0.922
	64 Ethylbenzene	91	9.814	9.814	(1.003)	29654	1.00000	0.954
	65 1,1,1,2-Tetrachloroethane	131	9.839	9.844	(1.005)	5063	1.00000	0.761
	66 m&p-Xylene	106	9.914	9.914	(1.013)	20563	2.00000	1.71
	67 o-Xylene	106	10.207	10.207	(1.043)	9510	1.00000	0.856
	68 Styrene	104	10.237	10.242	(1.046)	14813	1.00000	0.819
	69 Bromoform	173	10.267	10.267	(1.049)	3245	1.00000	0.824
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	24862	1.00000	0.867
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	542288	50.0000	50.7
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	1833	2.00000	1.25
	73 Bromobenzene	156	10.655	10.655	(0.948)	6832	1.00000	0.842
	74 n-Propylbenzene	91	10.655	10.660	(0.948)	28046	1.00000	0.844
	75 1,1,2,2-Tetrachloroethane	83	10.705	10.700	(0.953)	4620	1.00000	0.849
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	16681	1.00000	0.830

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.766	10.771	(0.958)	16808	1.00000	0.801
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	1470	1.00000	0.945
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	15471	1.00000	0.836
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	8324	1.00000	0.734
81 Pentachloroethane	167	10.977	10.982	(0.977)	4314	1.00000	0.904
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	17000	1.00000	0.824
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	21441	1.00000	0.810
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	16119	1.00000	0.755
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	11177	1.00000	0.865
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	540989	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.244	(1.000)	11665	1.00000	0.890
88 n-Butylbenzene	91	11.365	11.365	(1.012)	15465	1.00000	0.815
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	10931	1.00000	0.967
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	1304	1.00000	0.850
91 Hexachloro-1,3-butadiene	225	12.292	12.282	(1.094)	3137	1.00000	0.926(M)
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	3645	1.00000	0.683
93 Naphthalene	128	12.539	12.544	(1.116)	7837	1.00000	0.802
94 1,2,3-Trichlorobenzene	180	12.665	12.670	(1.127)	3627	1.00000	0.886

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

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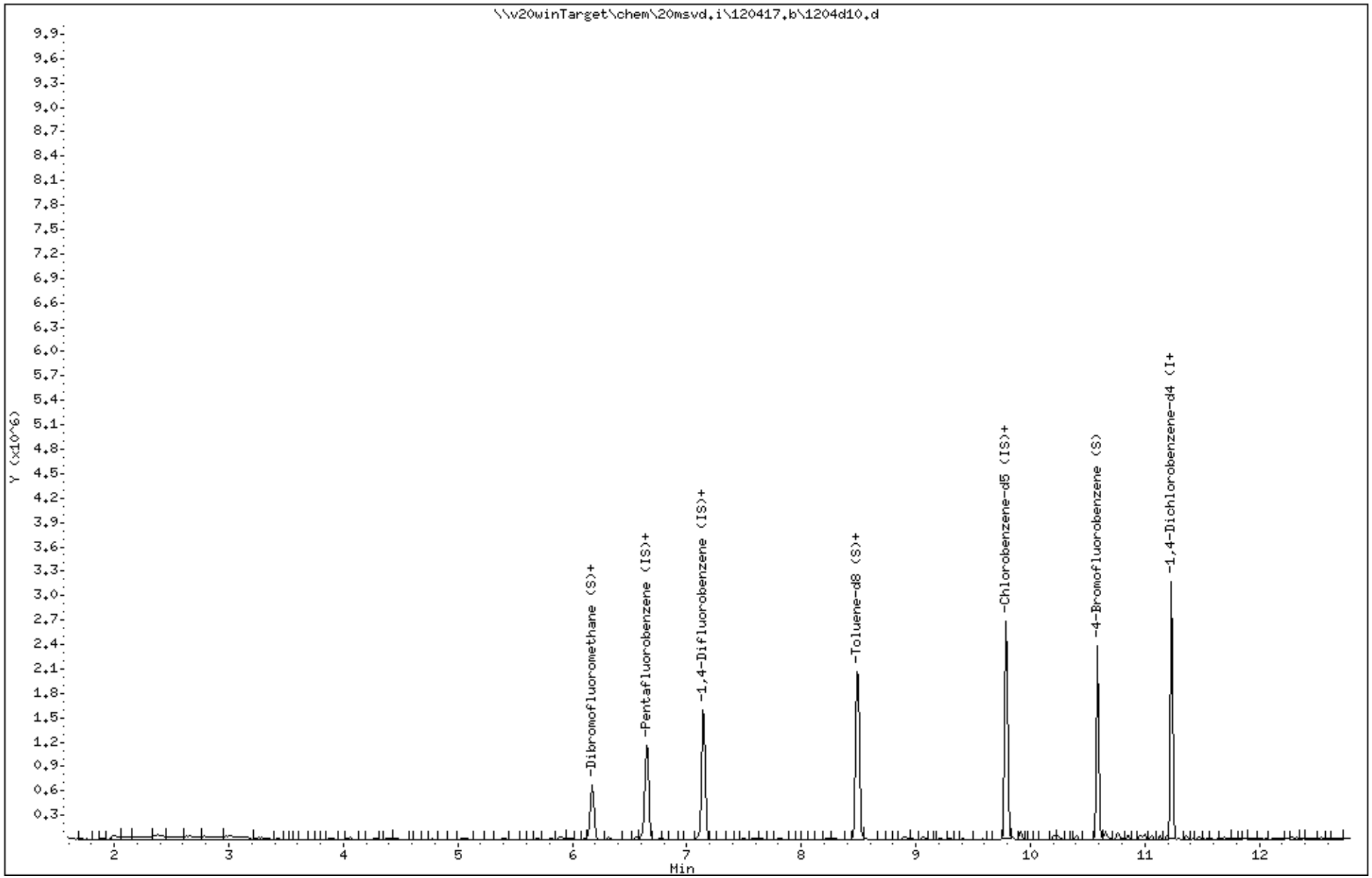
Instrument: 20msvd.i
Sample Info: CAL2,54928:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



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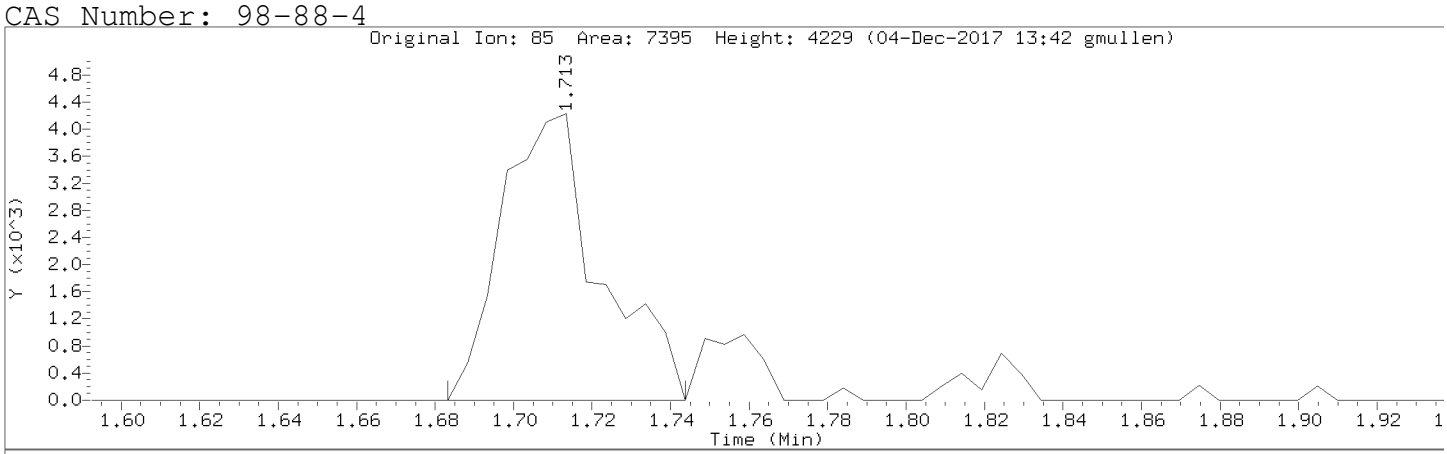
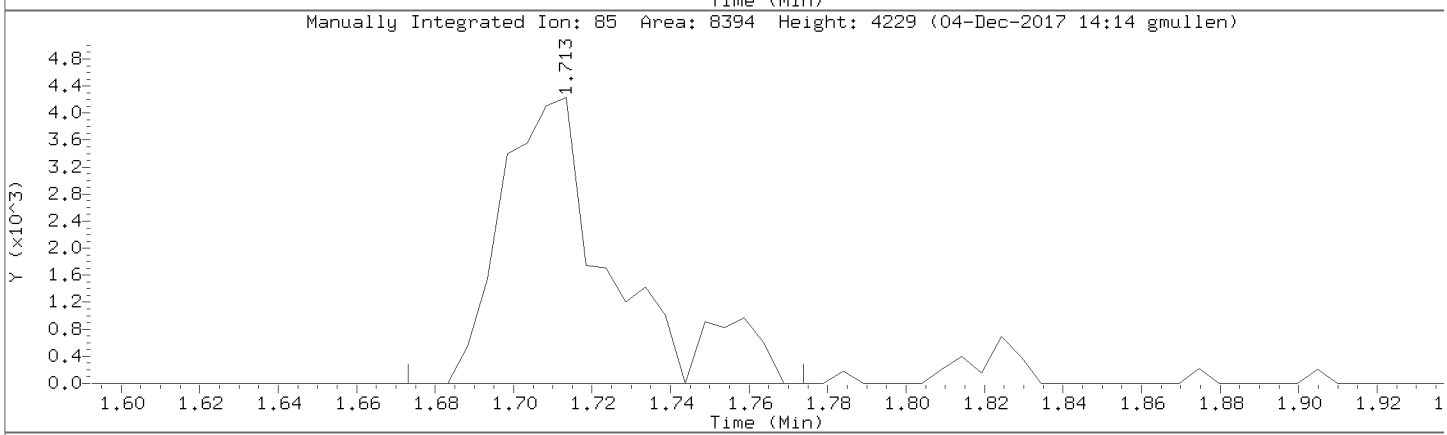
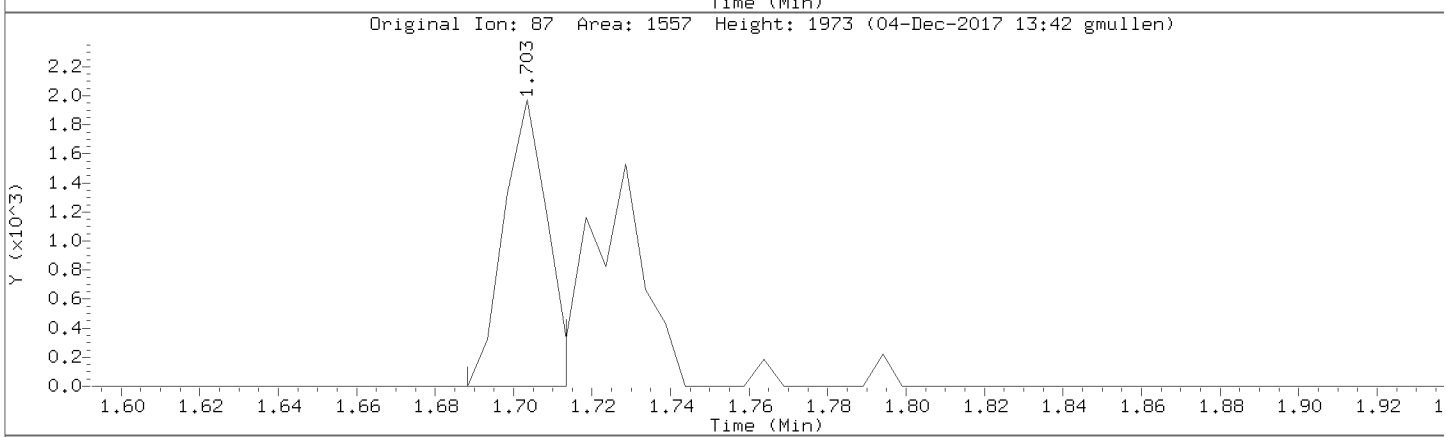
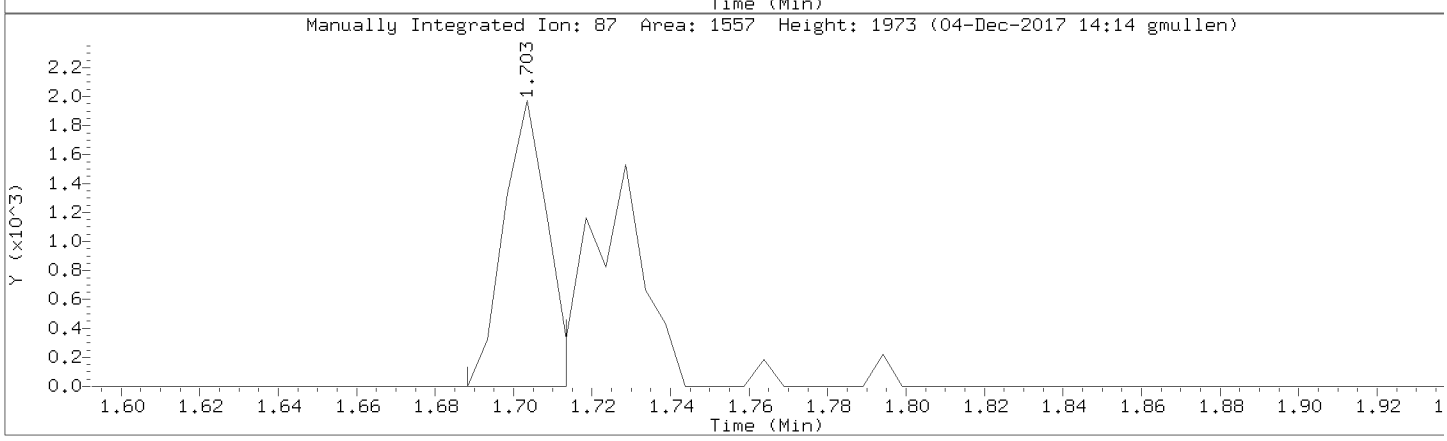
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Dichlorodifluoromethane Review Code: LT
CAS Number: 98-88-4









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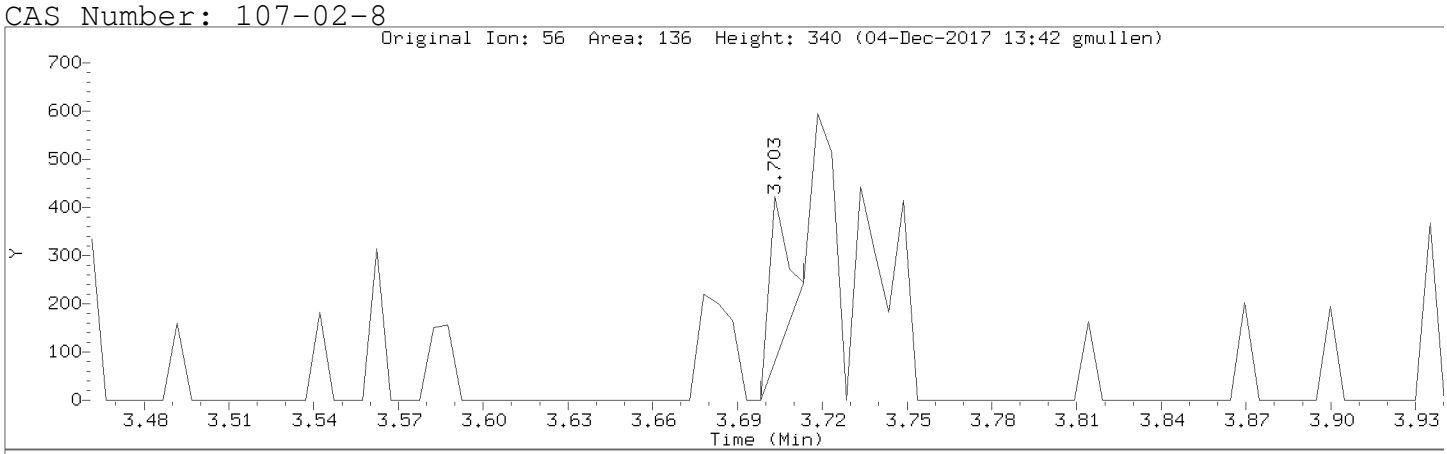
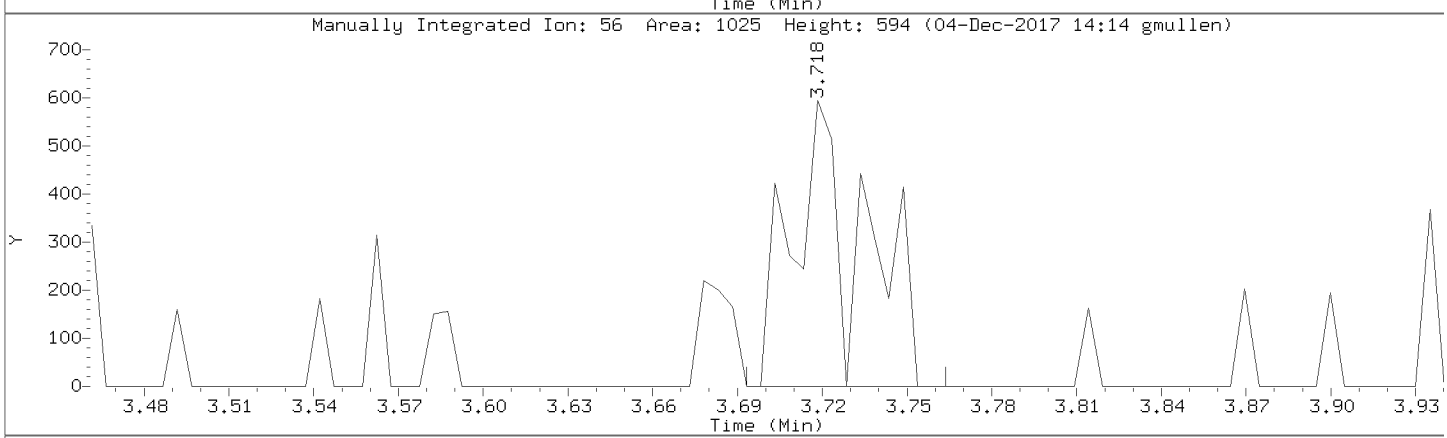
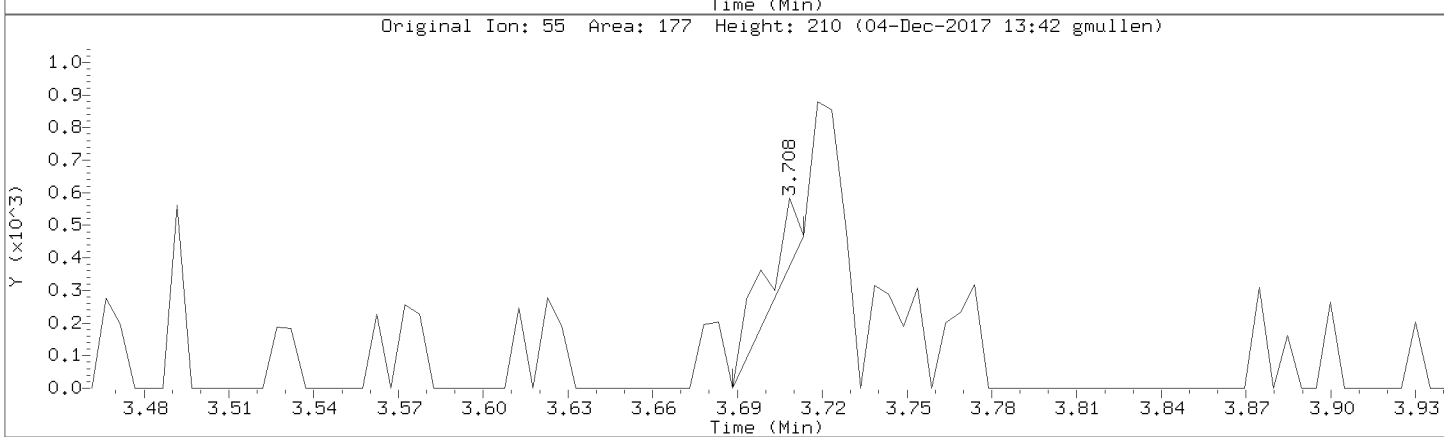
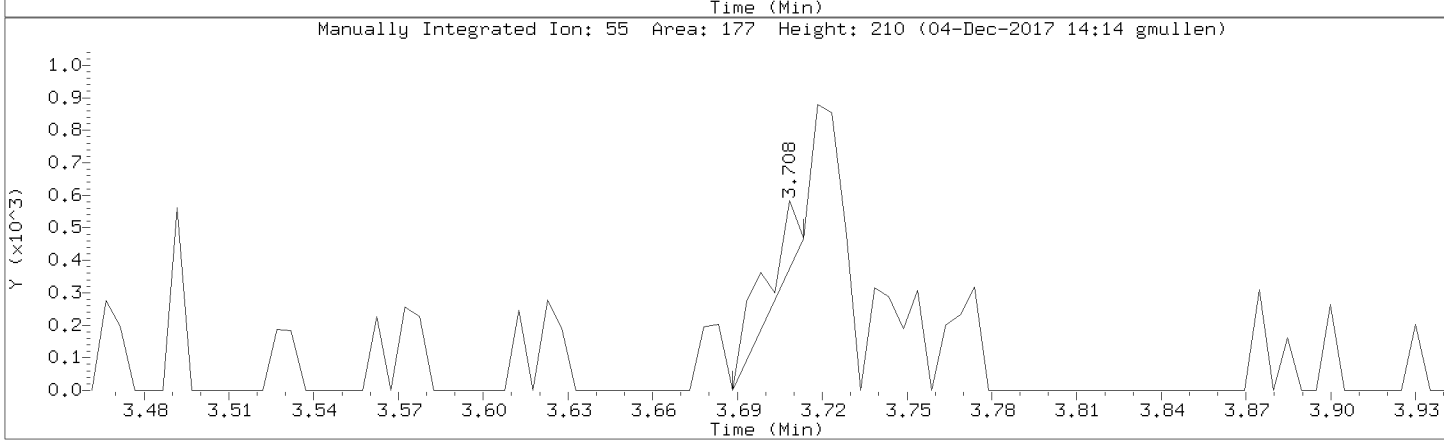
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Acrolein Review Code: LT
CAS Number: 107-02-8









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Injection Date: 04-DEC-2017 11:34
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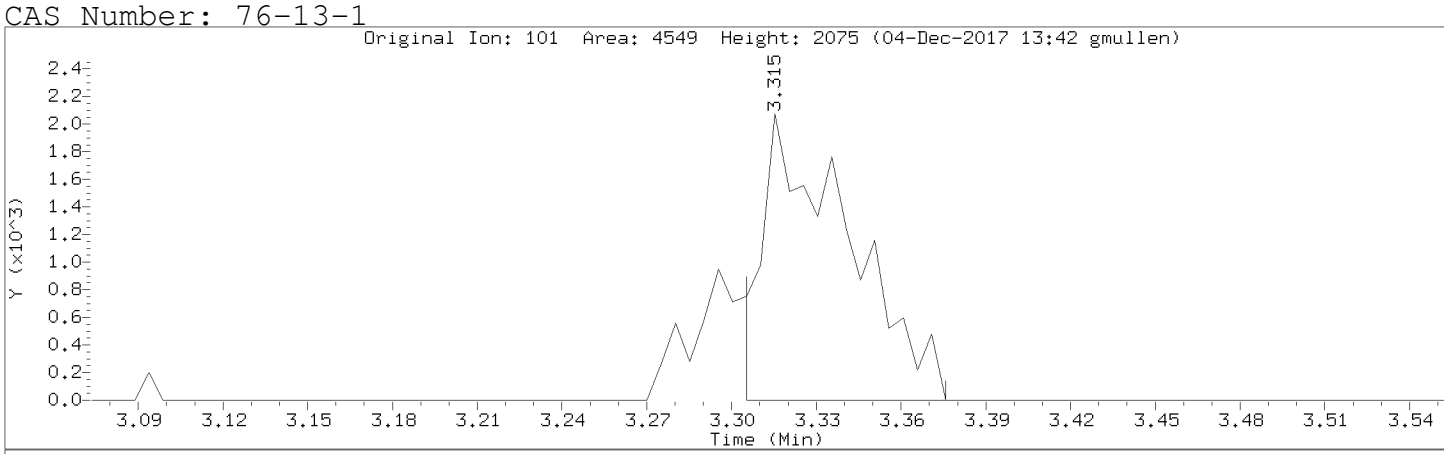
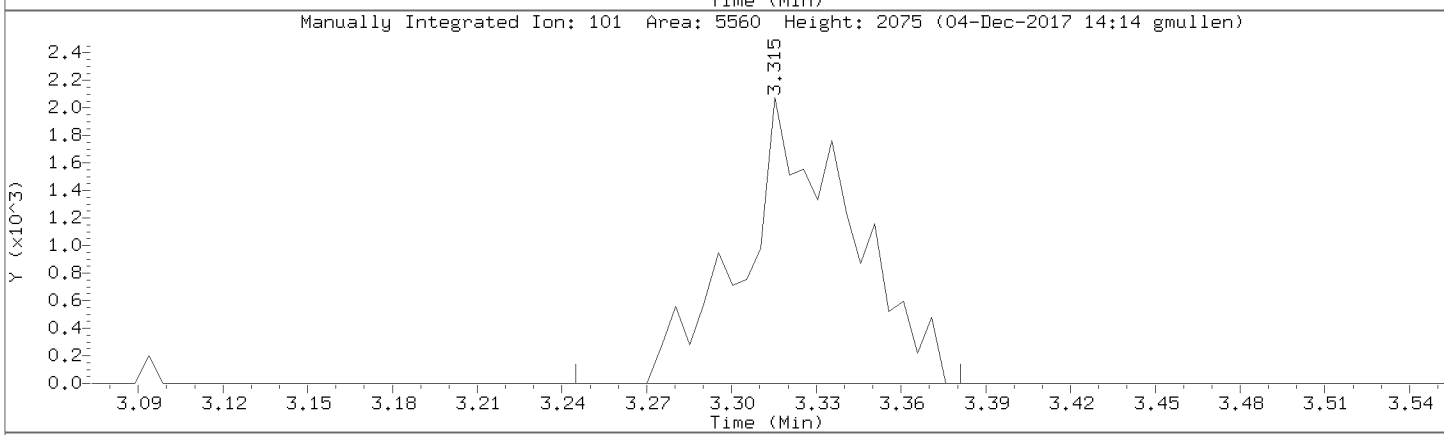
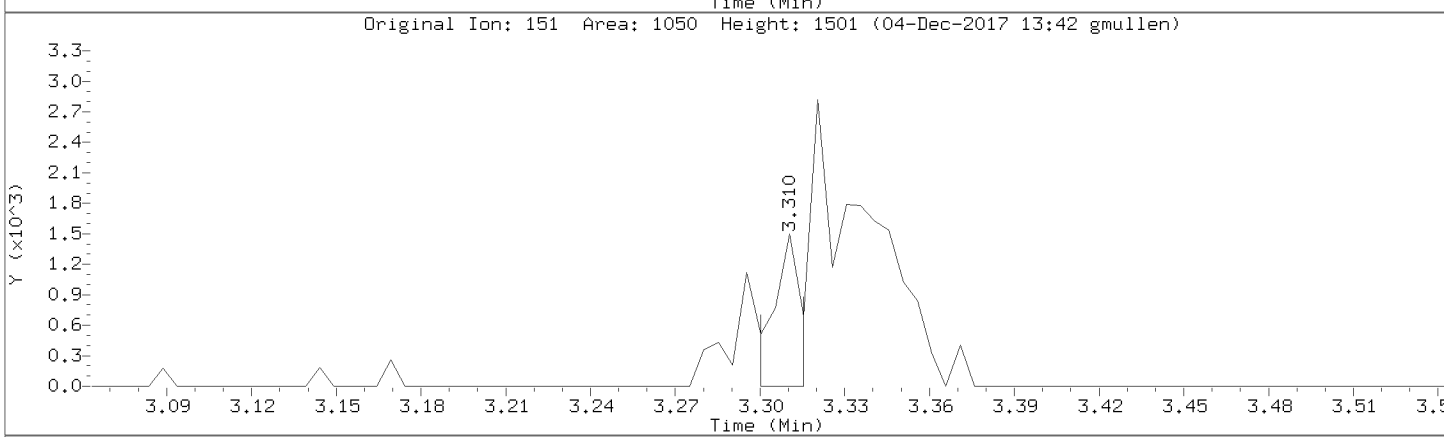
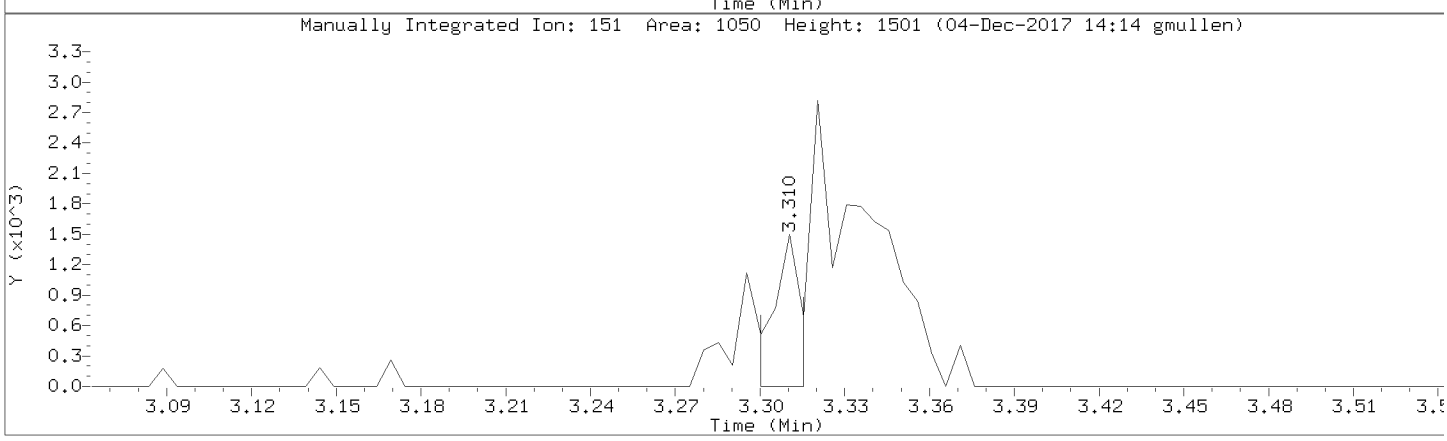
Lab Sample ID: CAL2

Compound: 1,1,2-Trichlorotrifluoroethane Review Code: LT
CAS Number: 76-13-1









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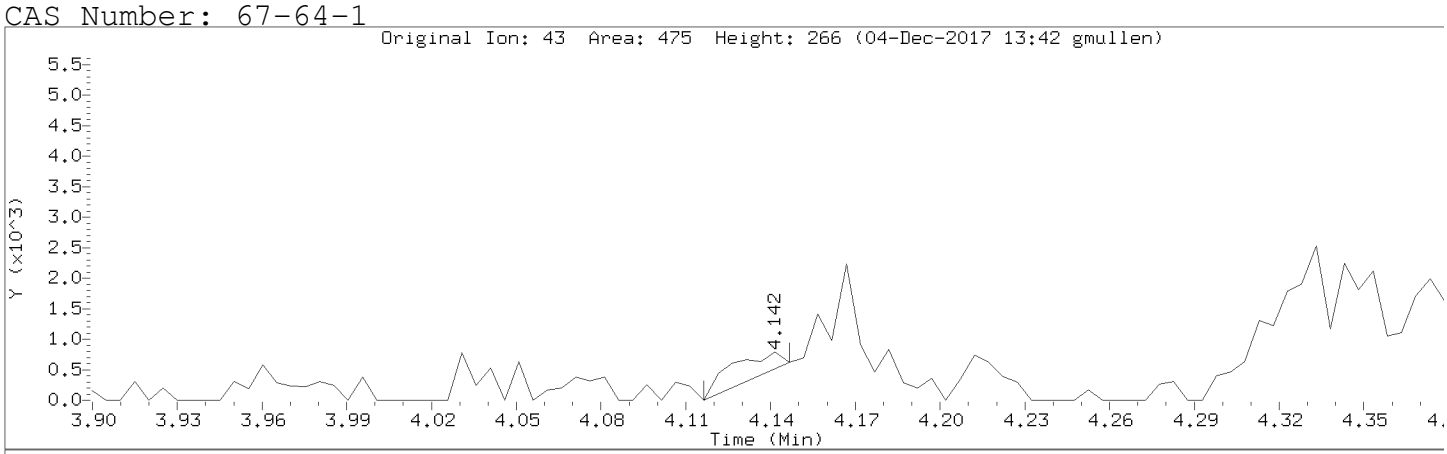
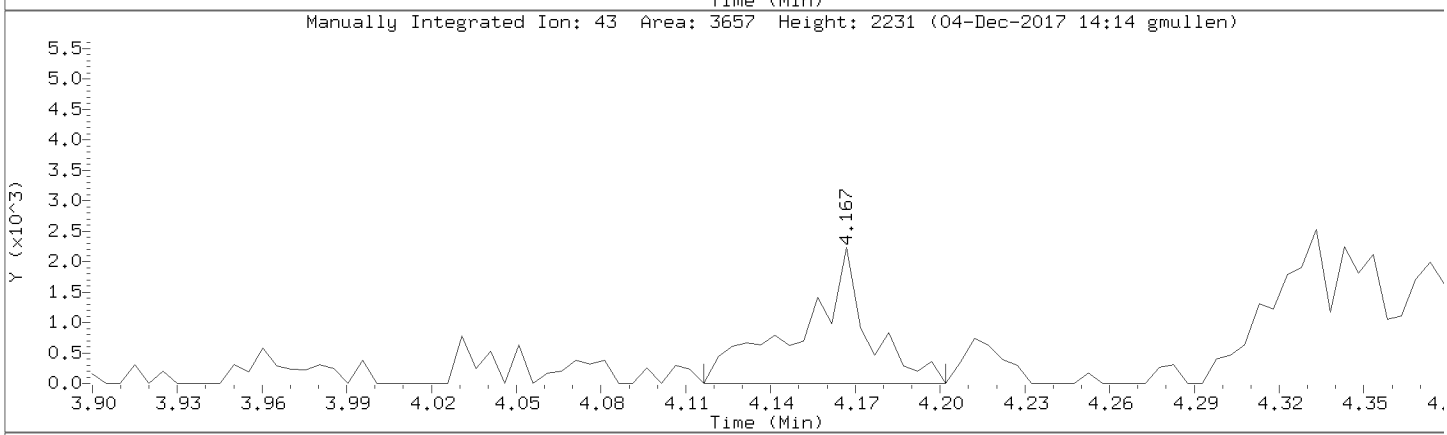
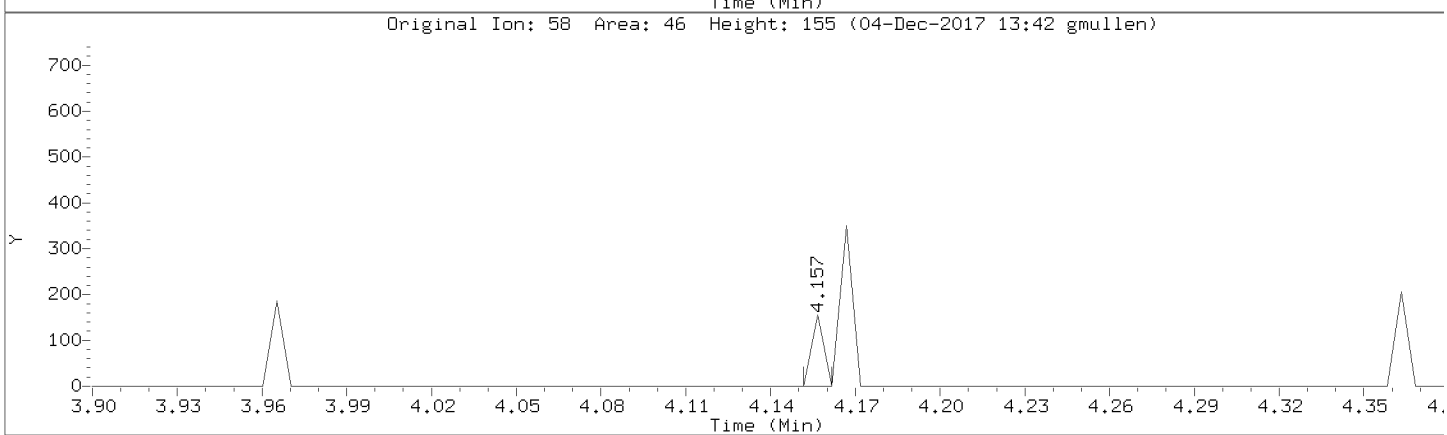
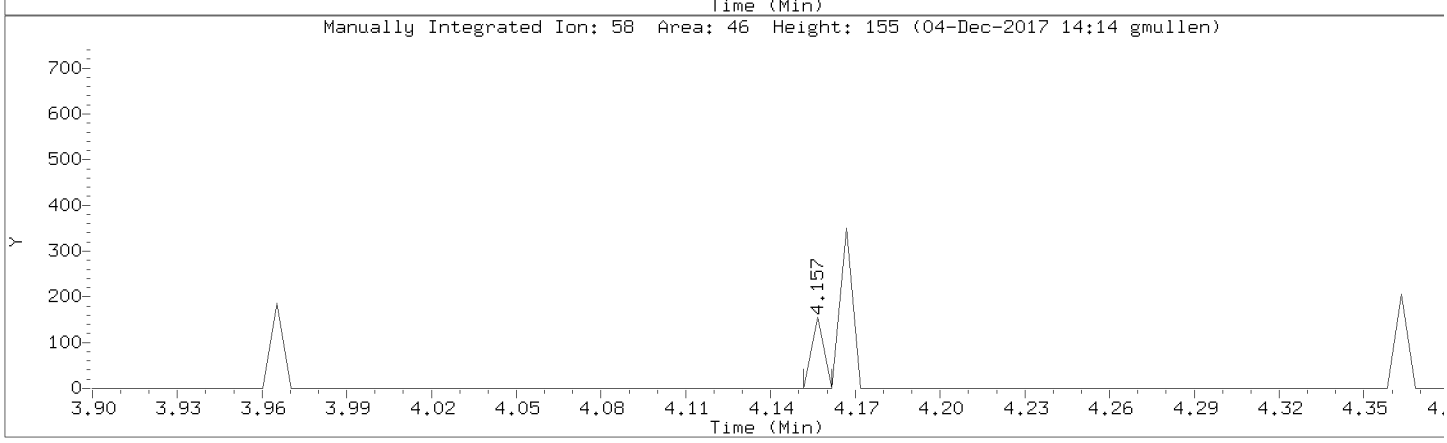
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Acetone Review Code: LT
CAS Number: 67-64-1









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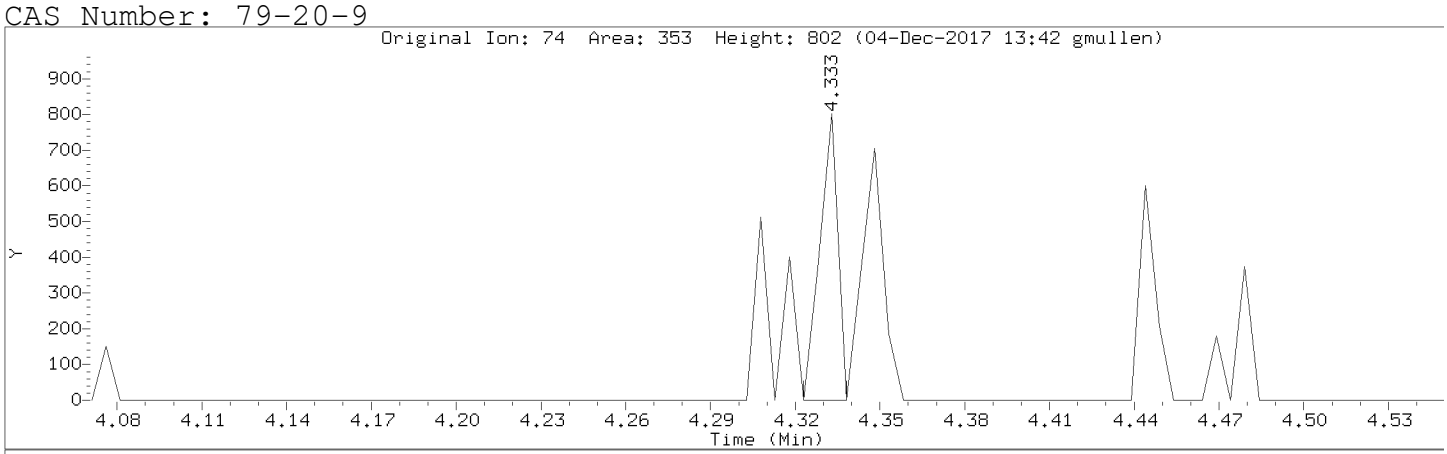
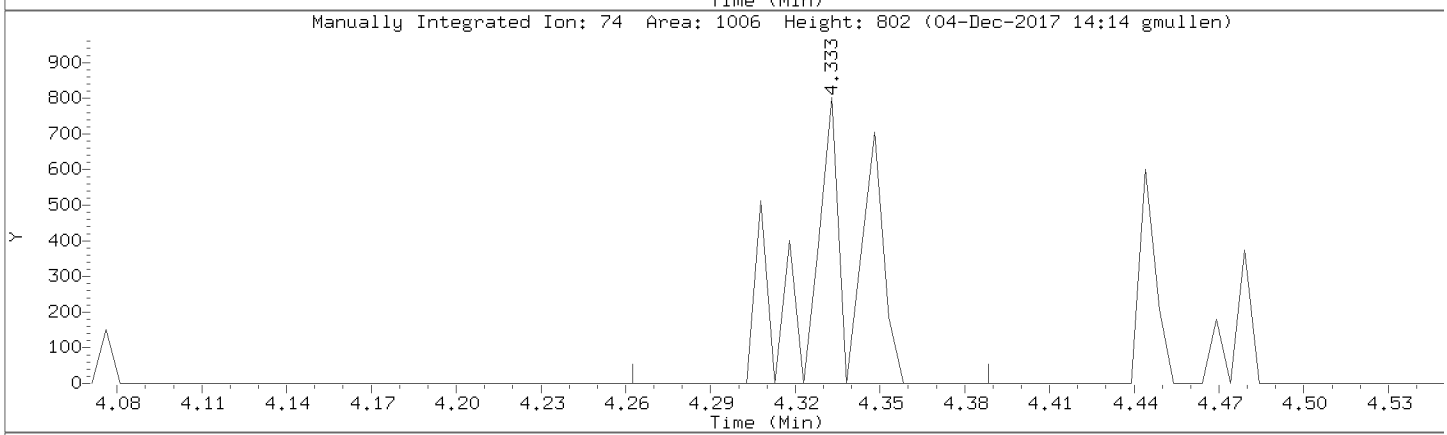
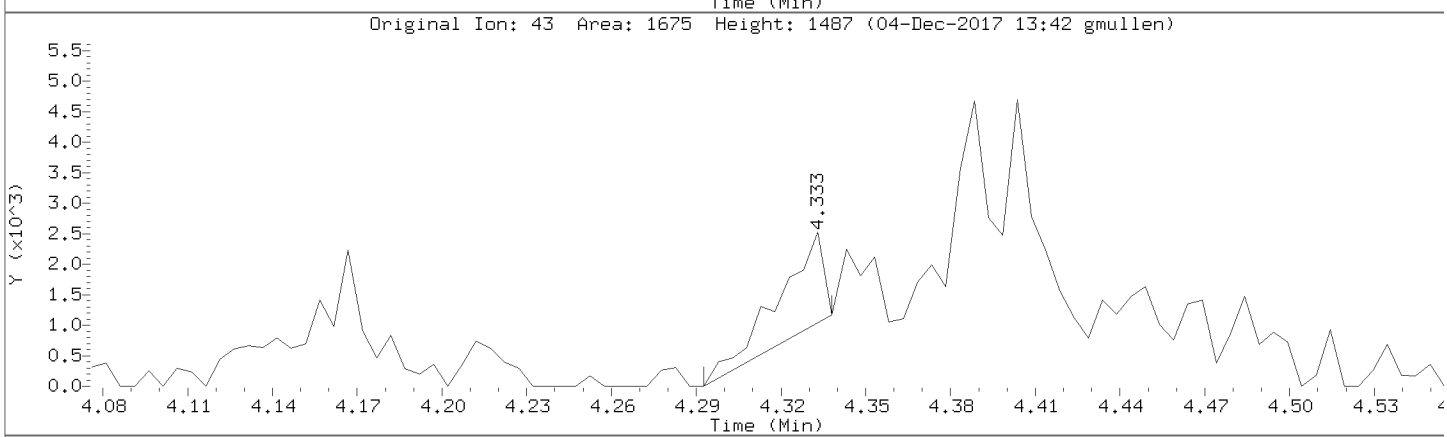
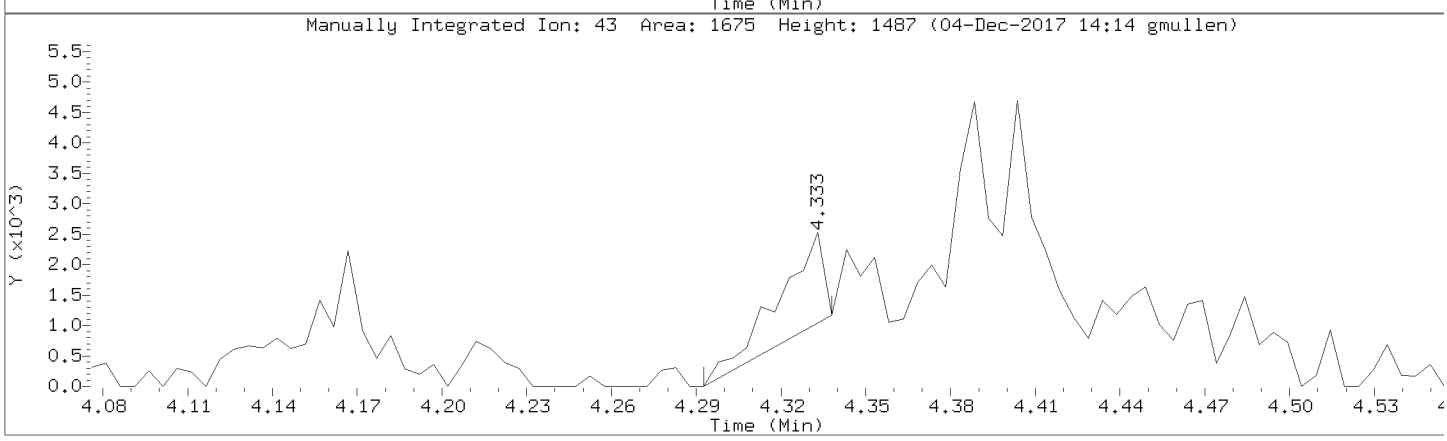
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Methyl Acetate Review Code: LT
CAS Number: 79-20-9









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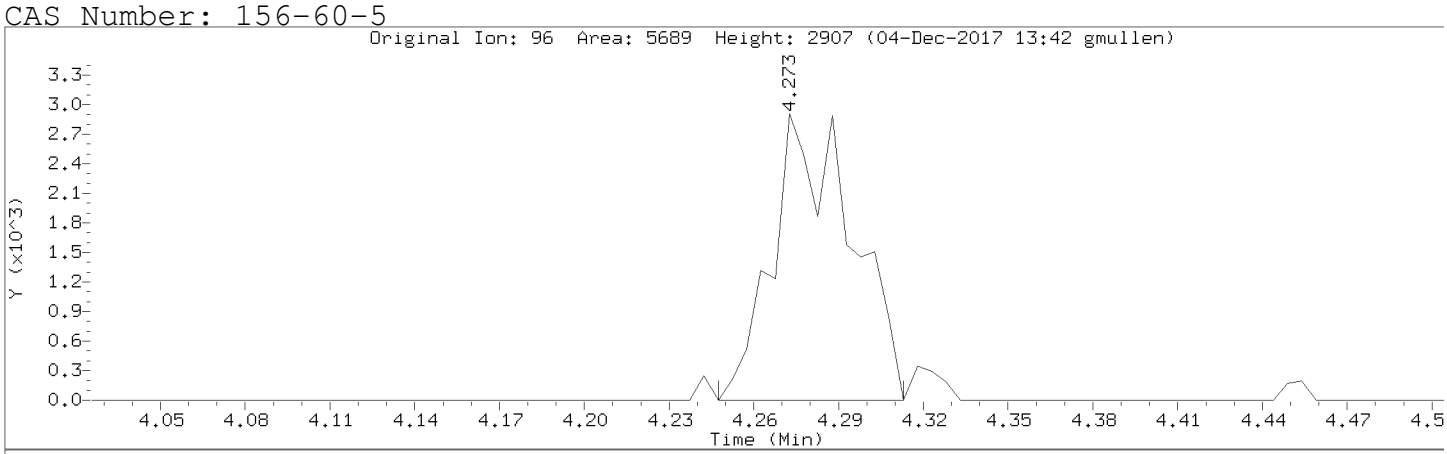
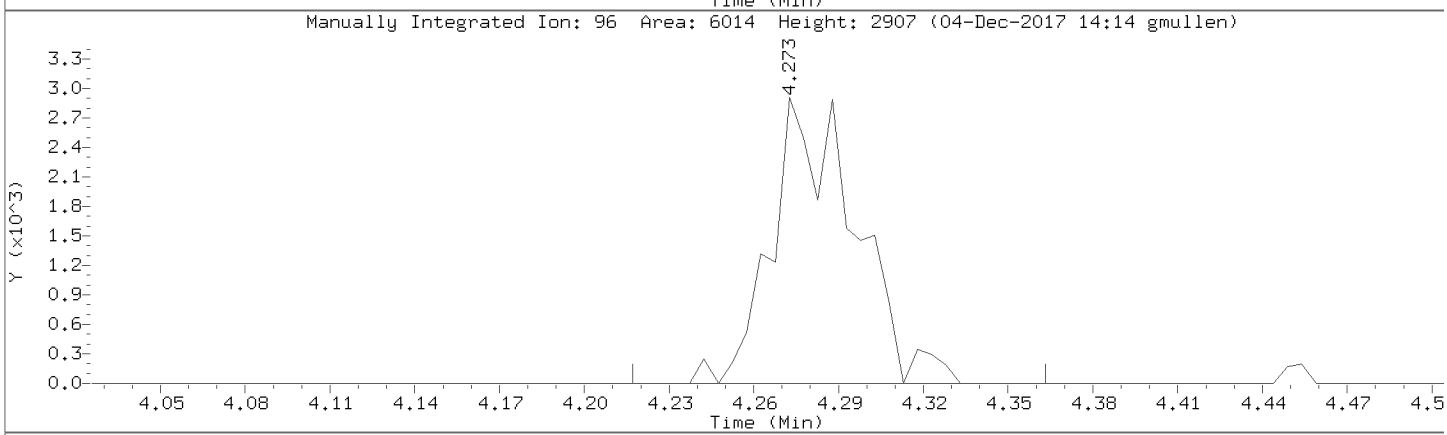
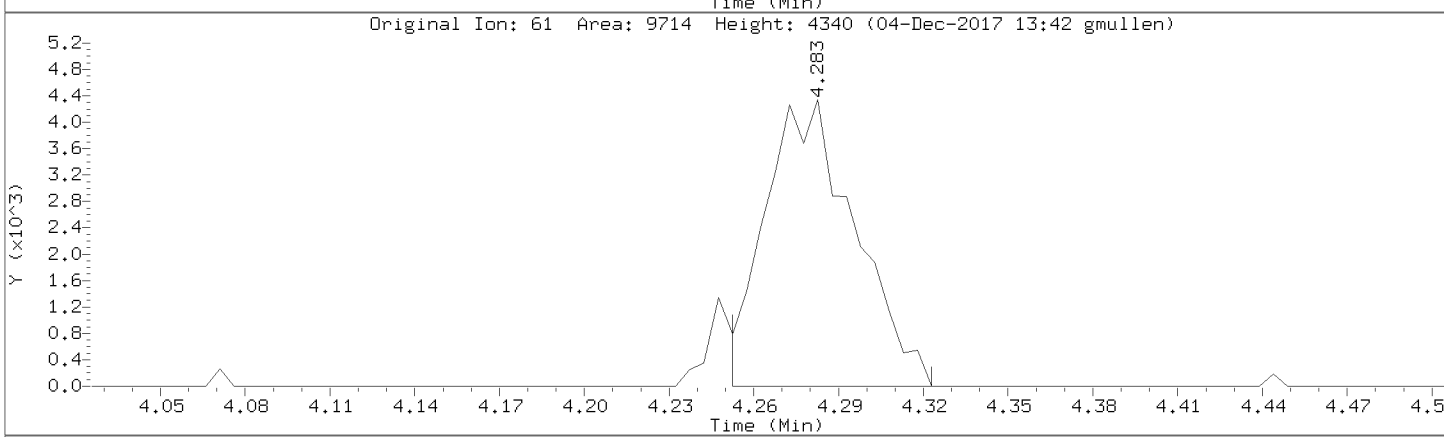
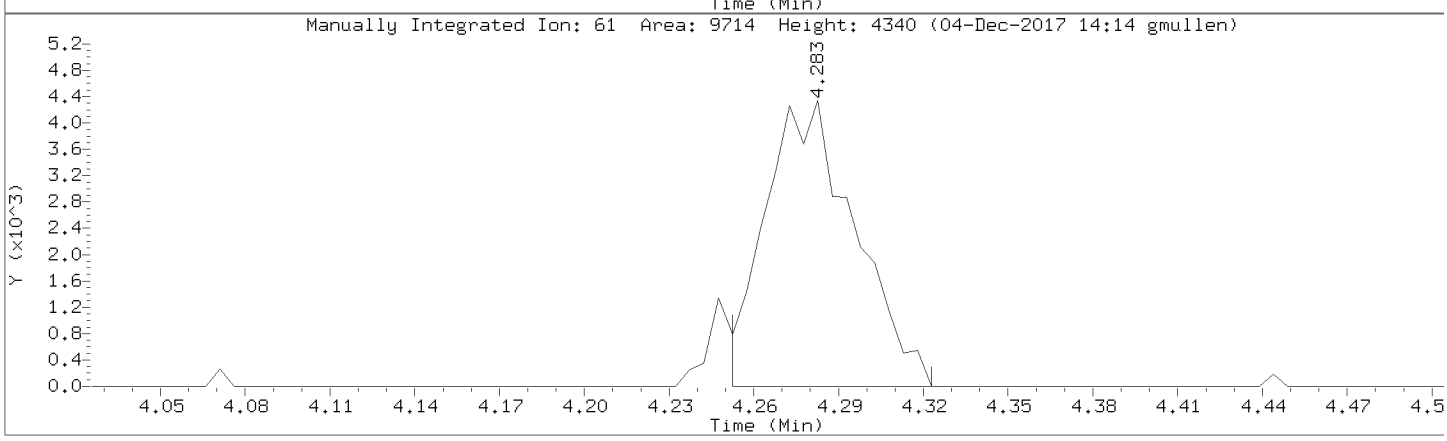
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: trans-1,2-Dichloroethene Review Code: LT
CAS Number: 156-60-5









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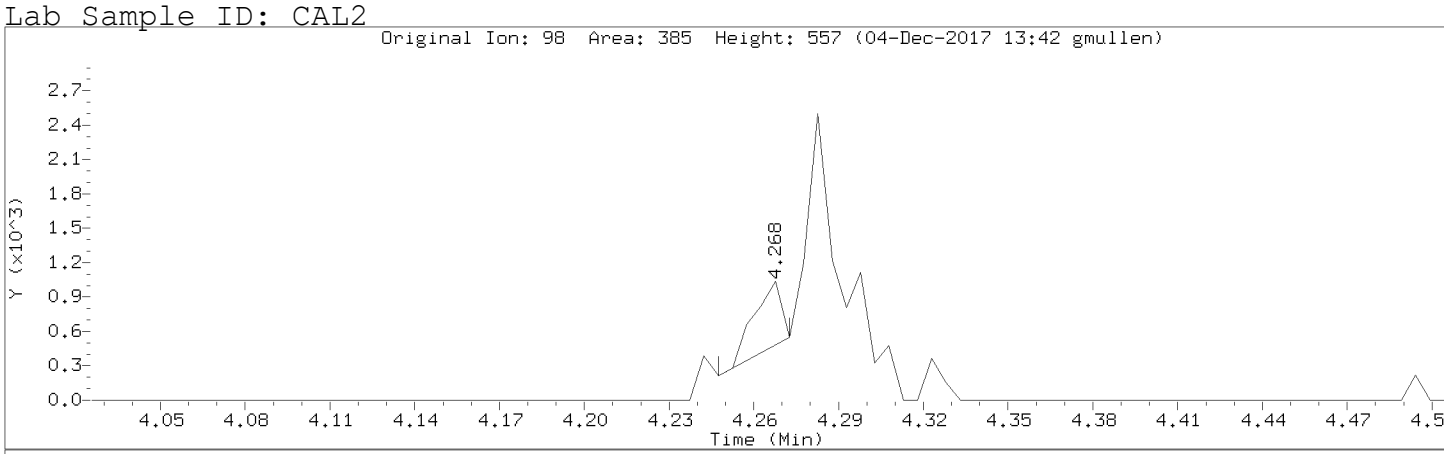
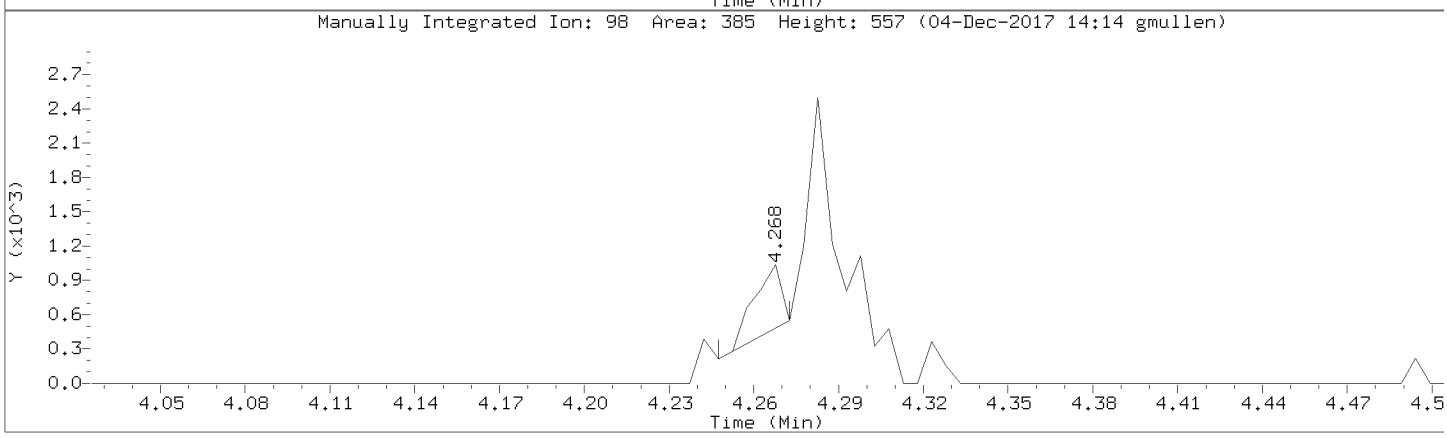
Lab Sample ID: CAL2





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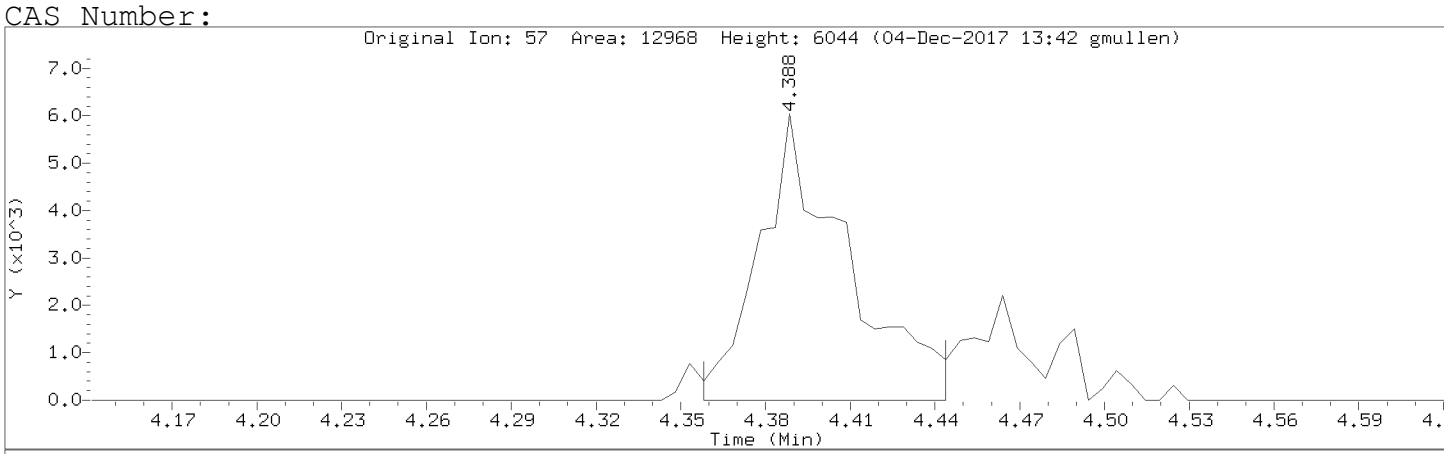
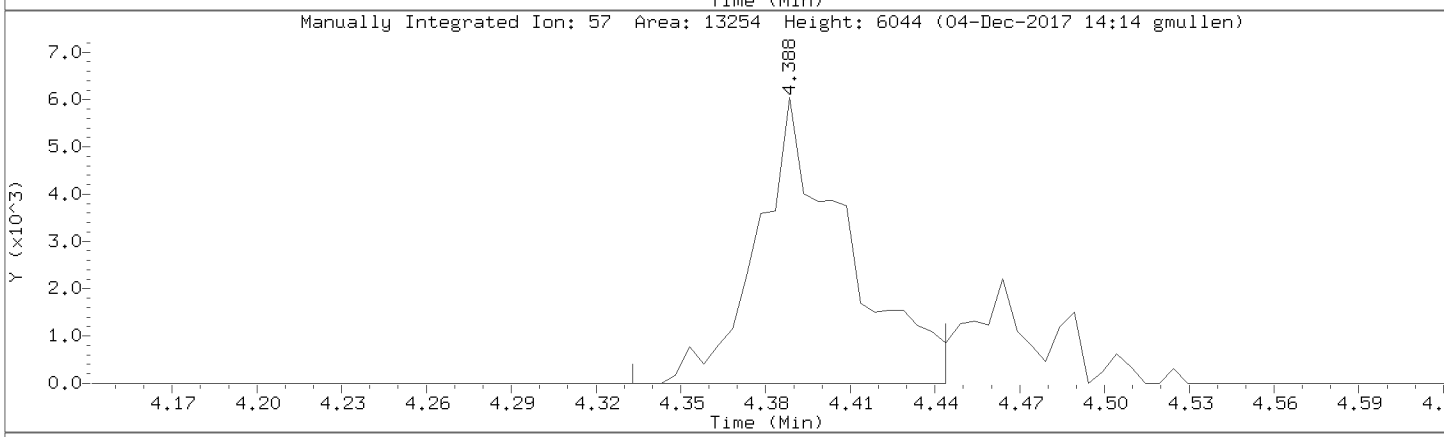
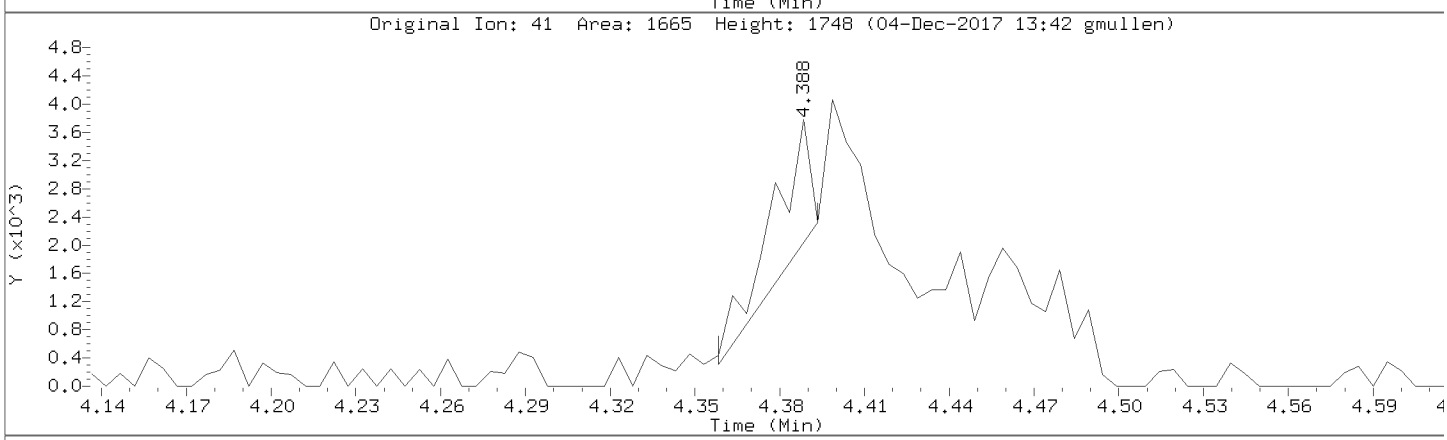
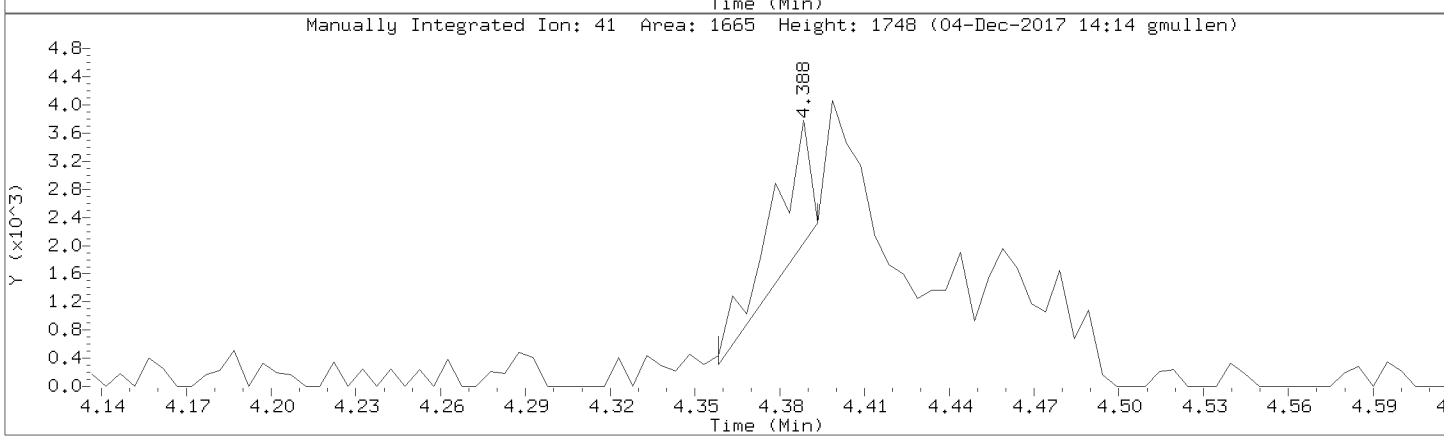
Lab Sample ID: CAL2

Compound: n-Hexane Review Code: LT
CAS Number:









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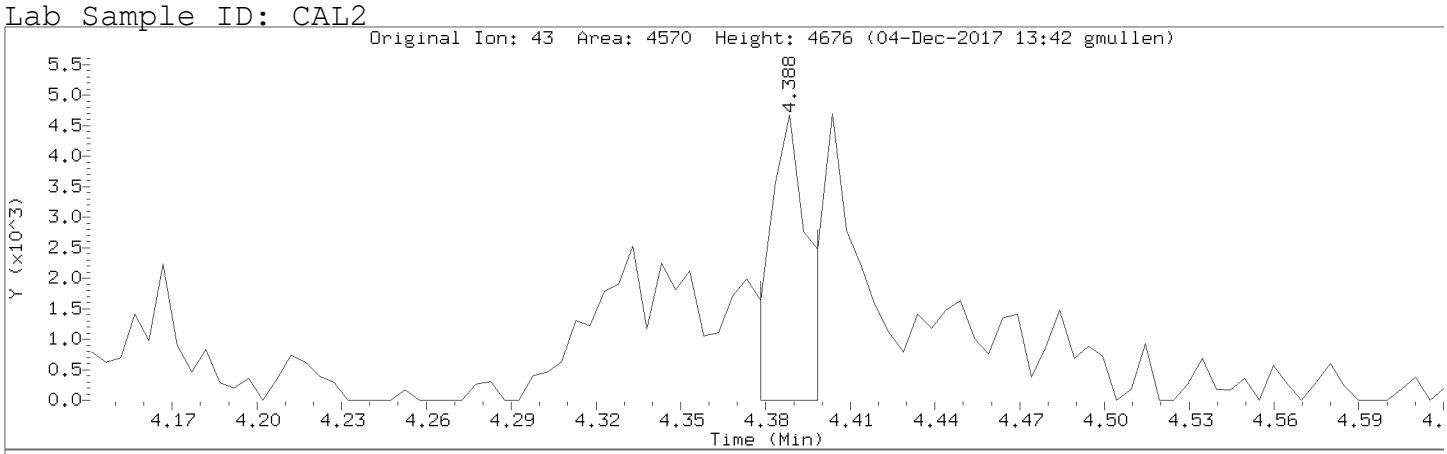

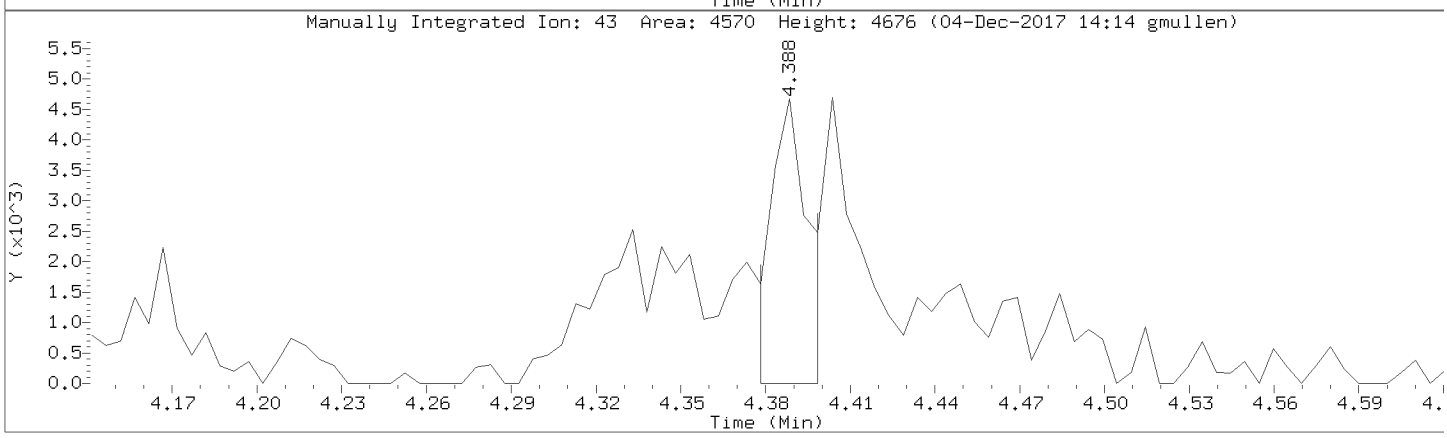

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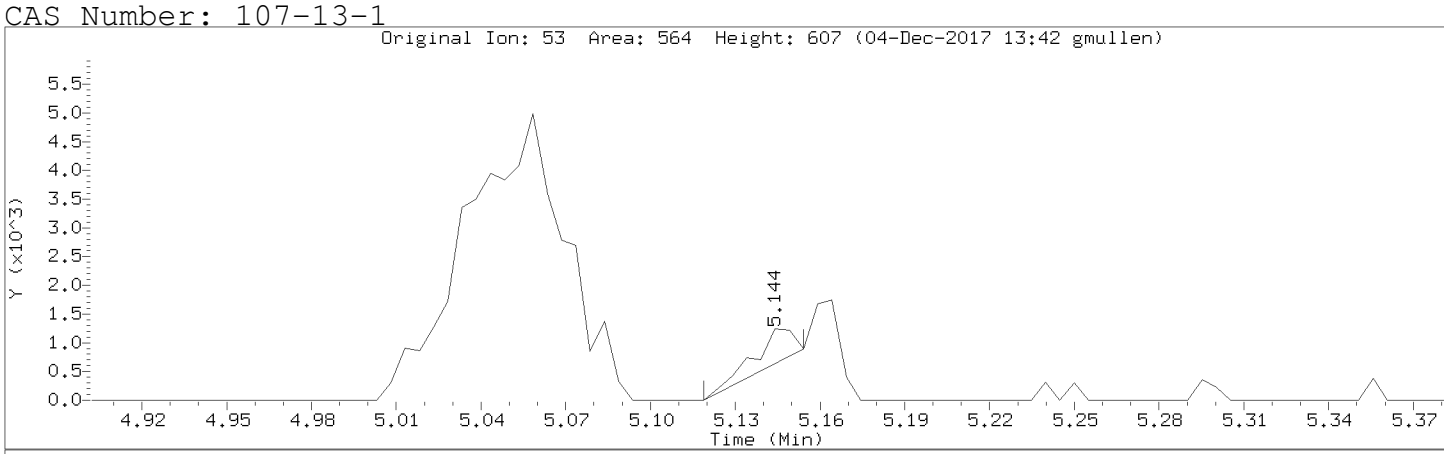
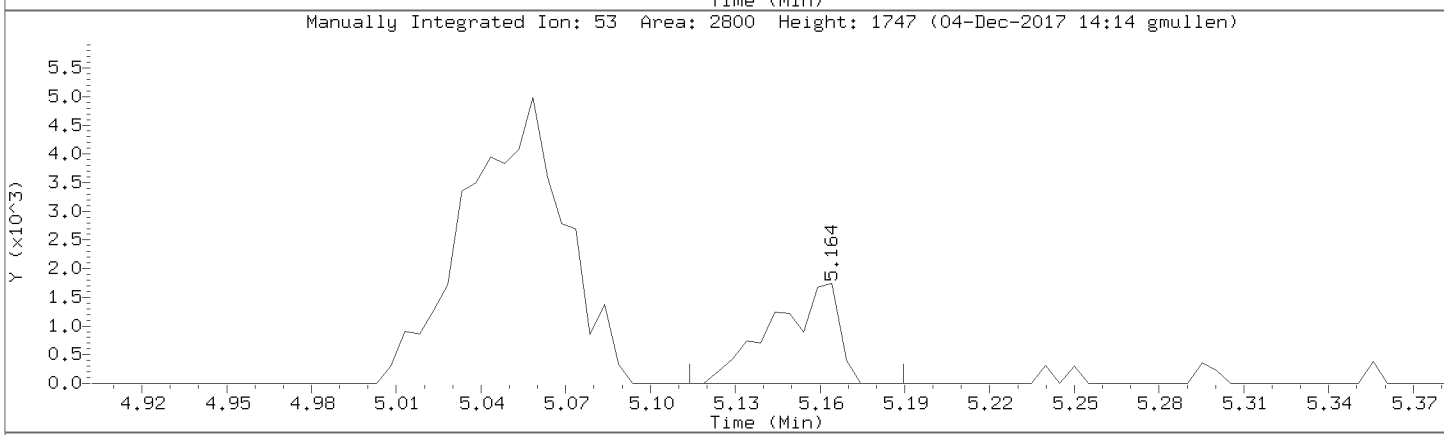
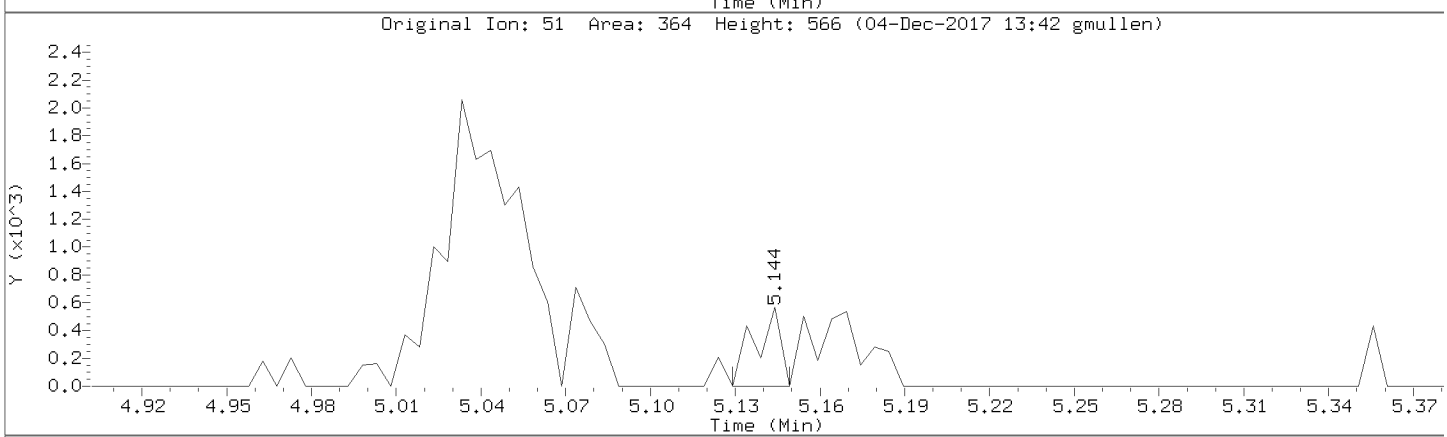
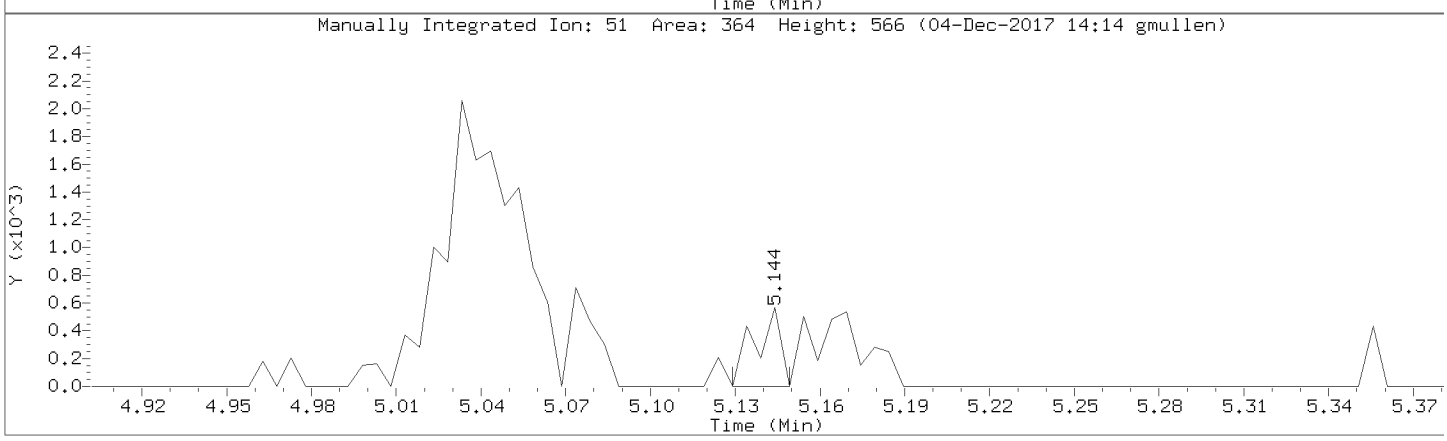
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Acrylonitrile Review Code: LT
CAS Number: 107-13-1









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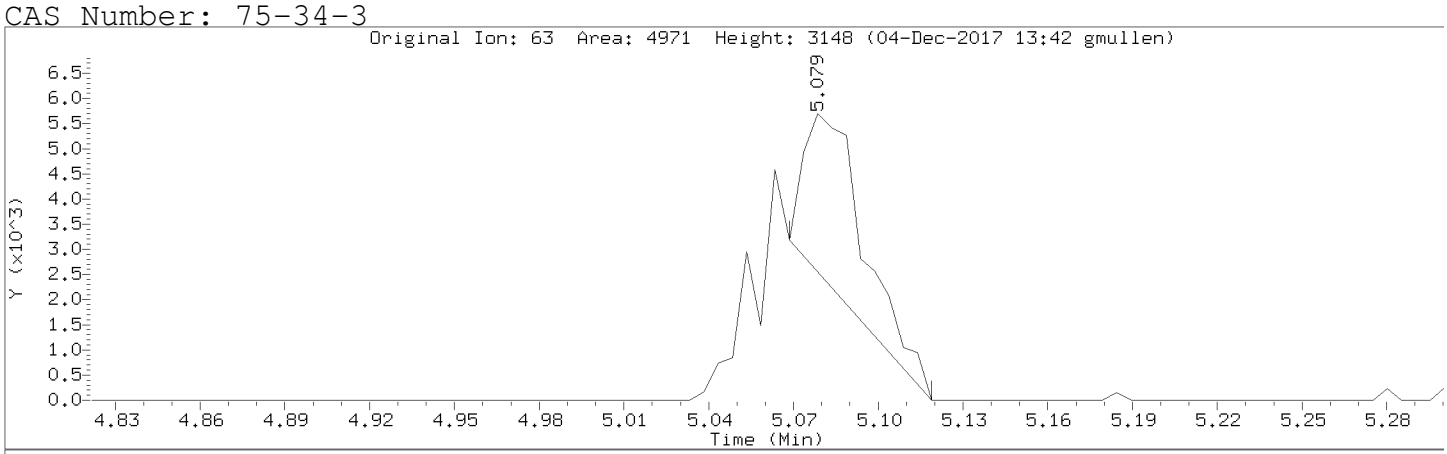
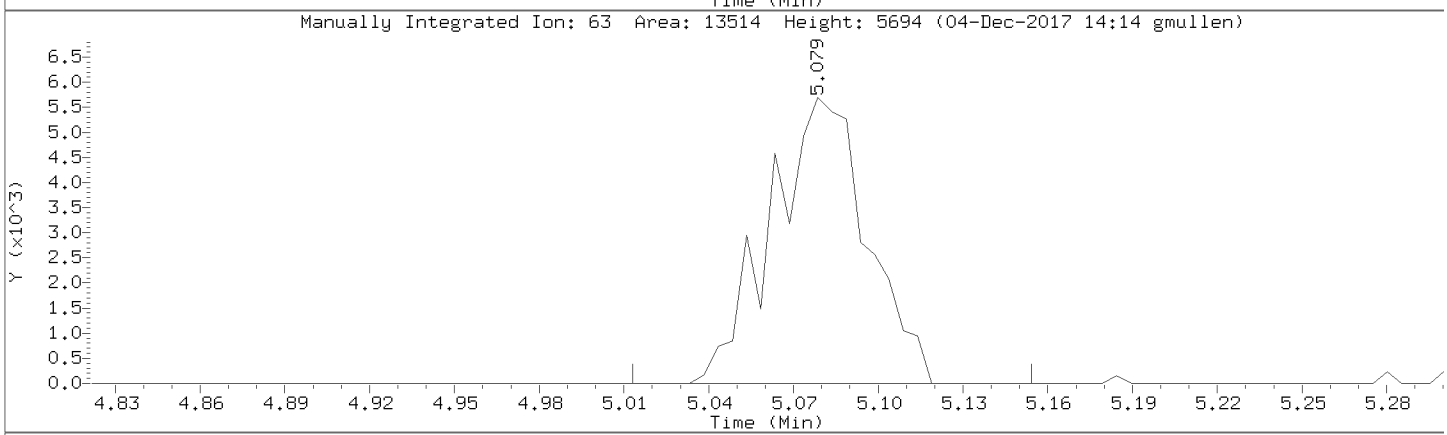
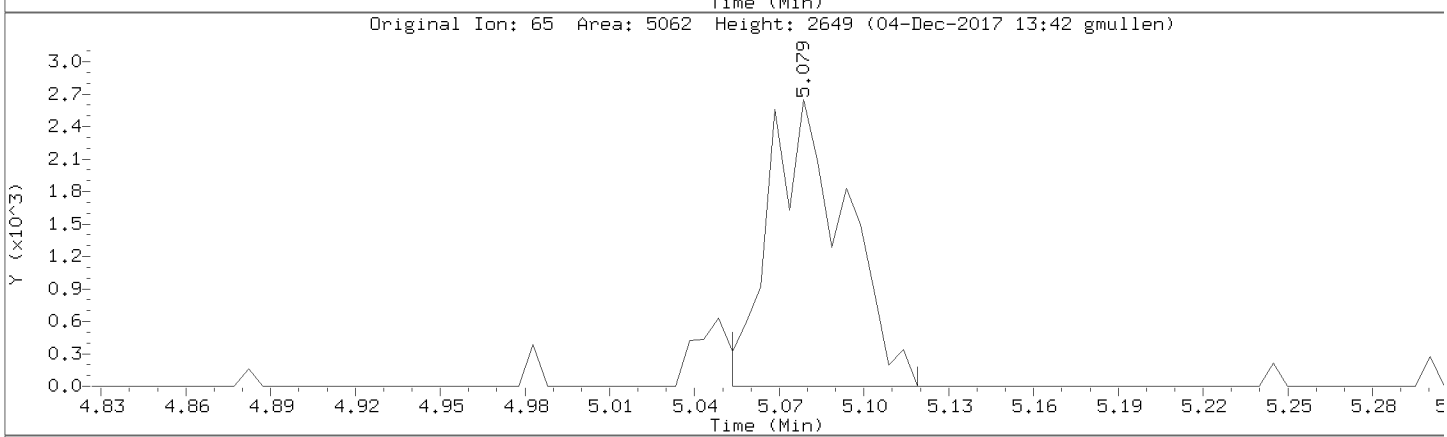
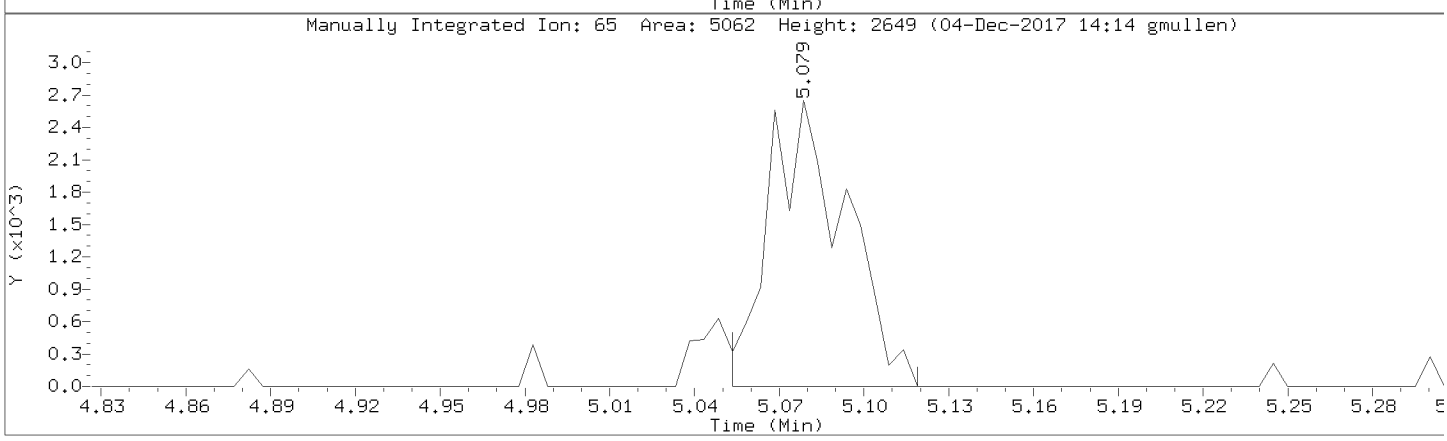
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 1,1-Dichloroethane Review Code: LT
CAS Number: 75-34-3









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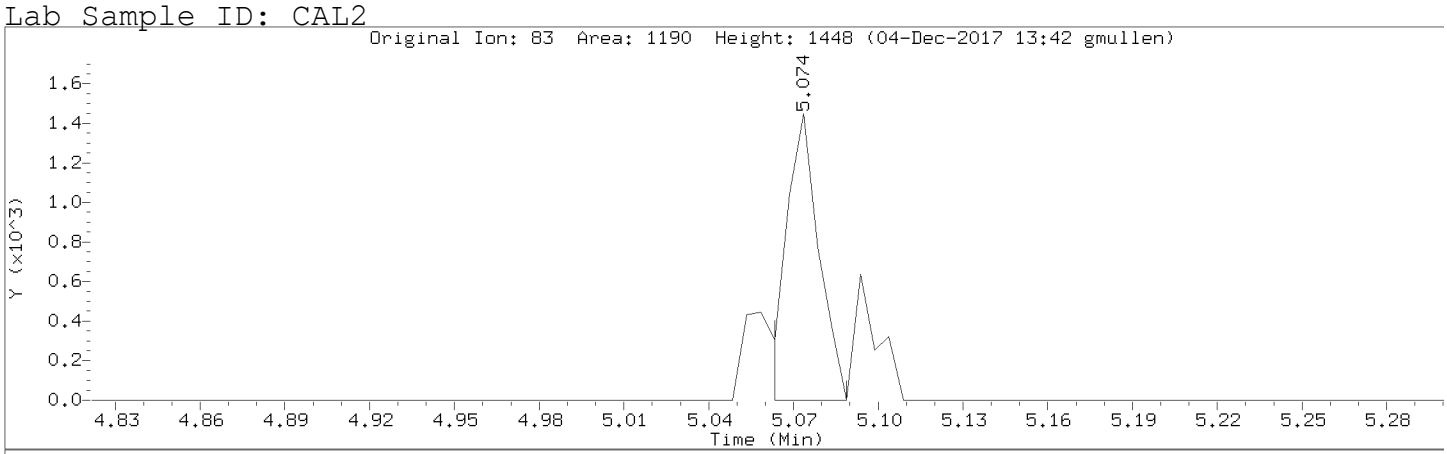
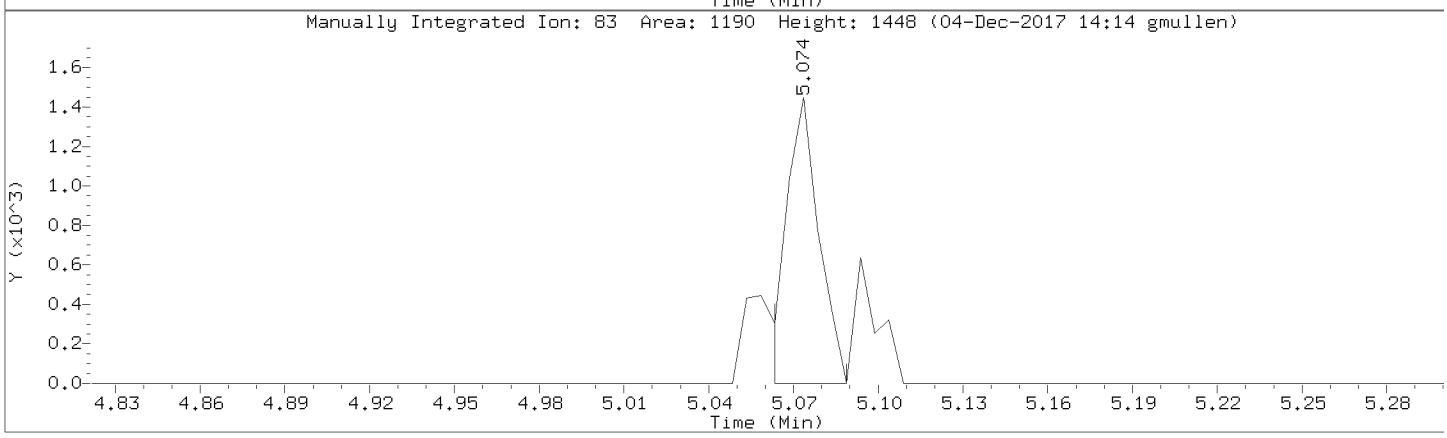
Lab Sample ID: CAL2





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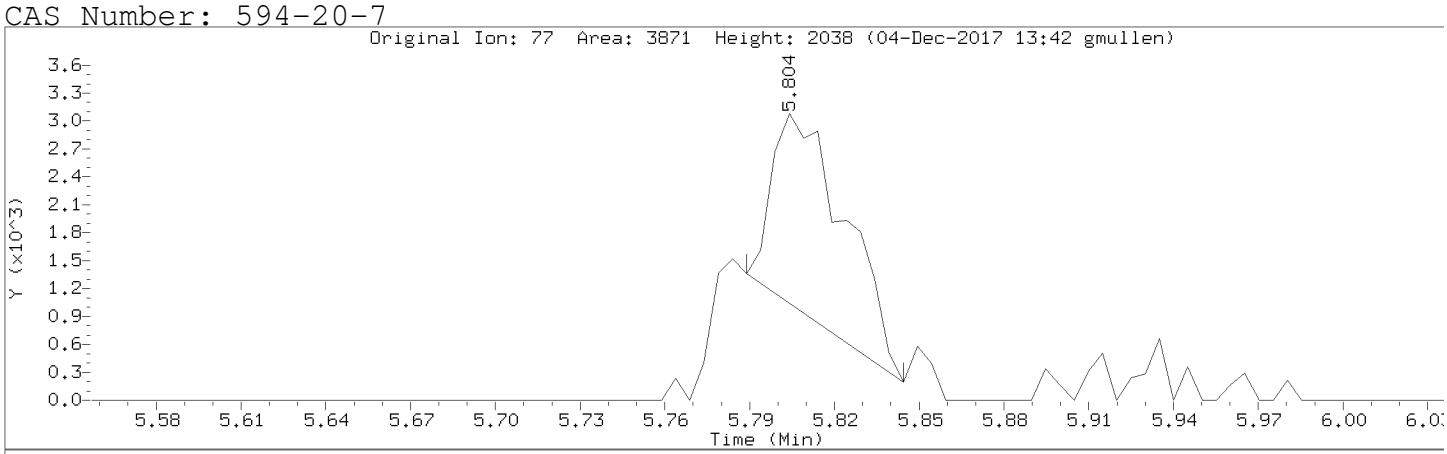
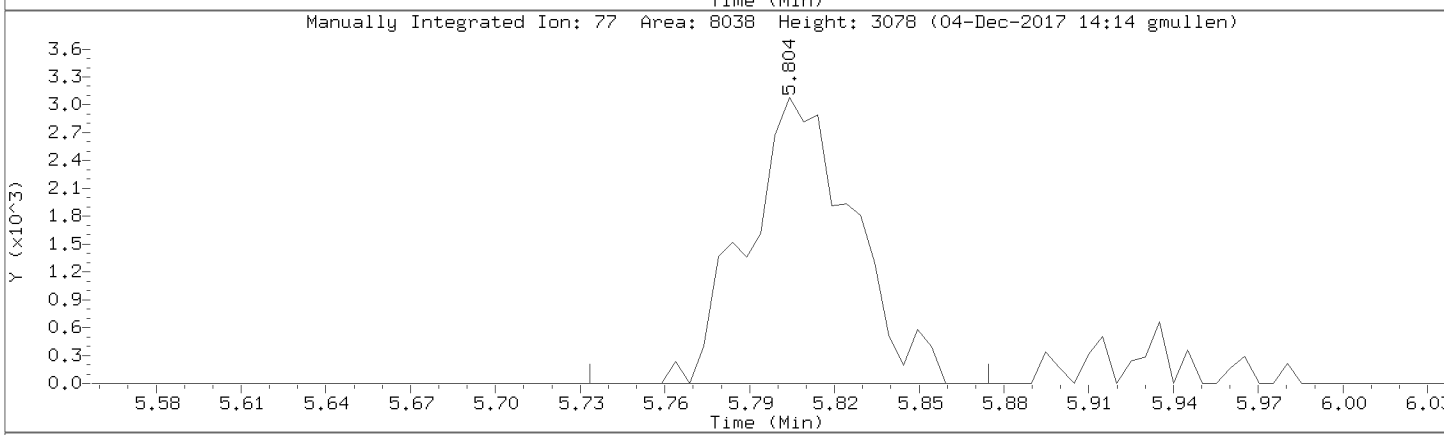
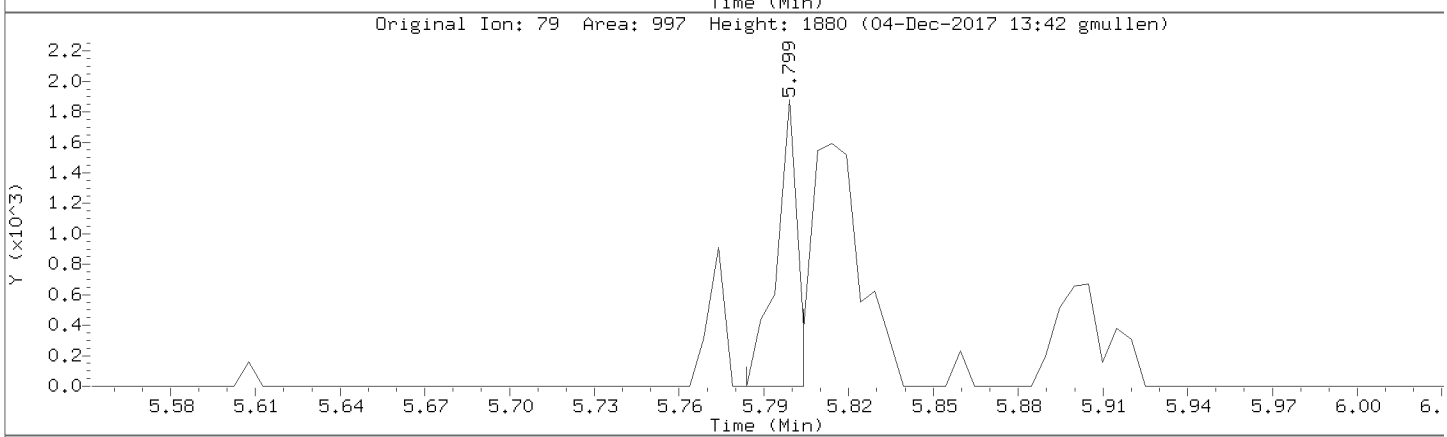
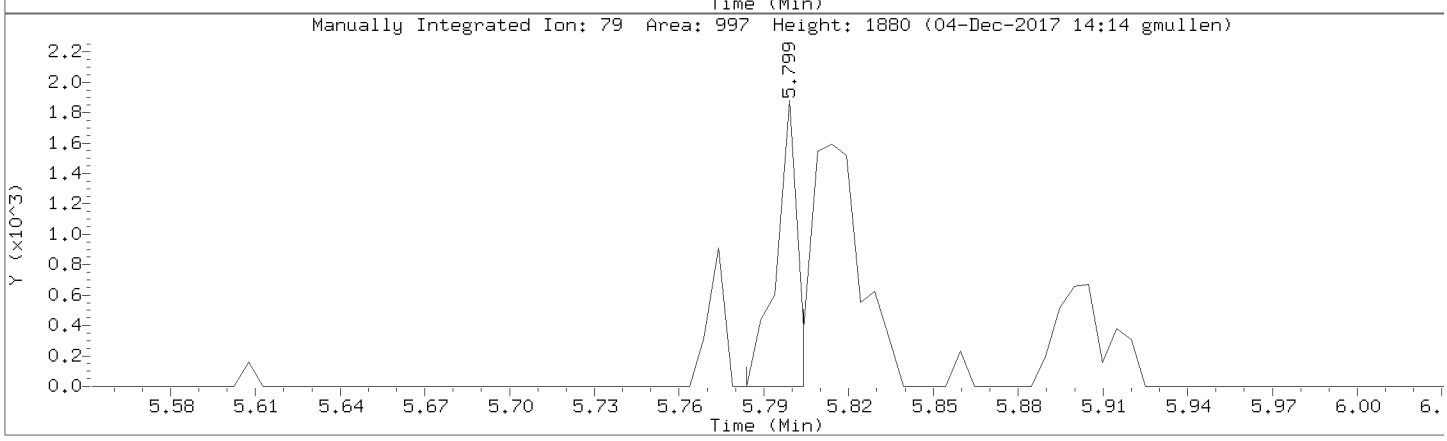
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 2,2-Dichloropropane Review Code: LT
CAS Number: 594-20-7









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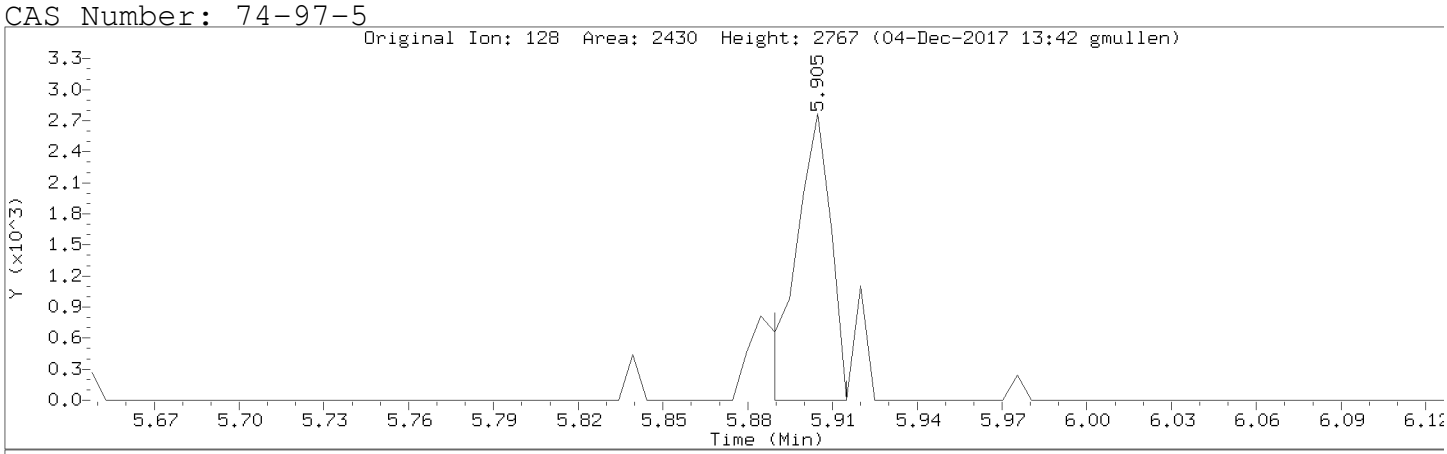
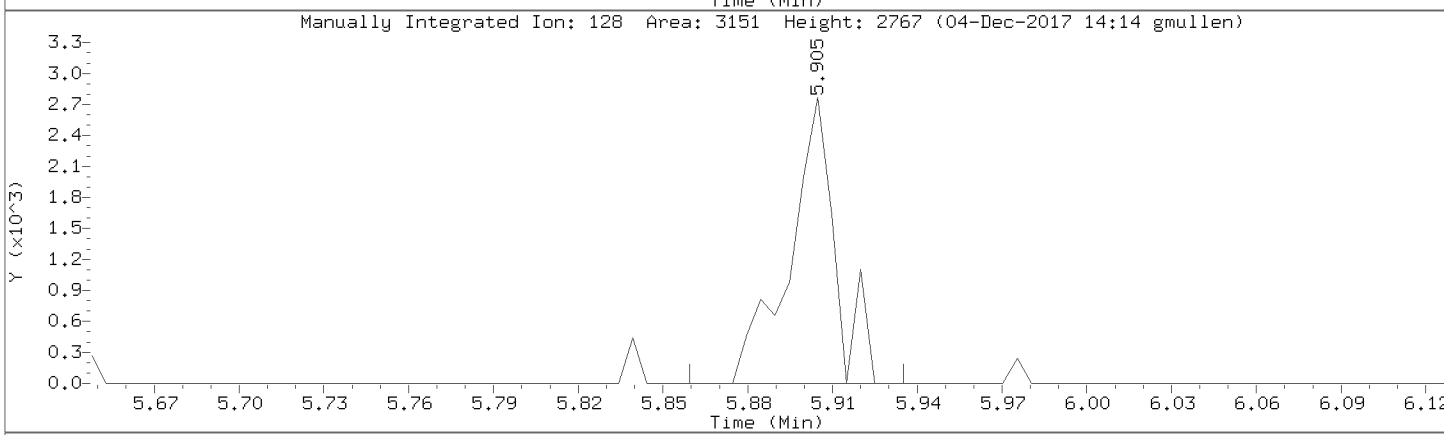
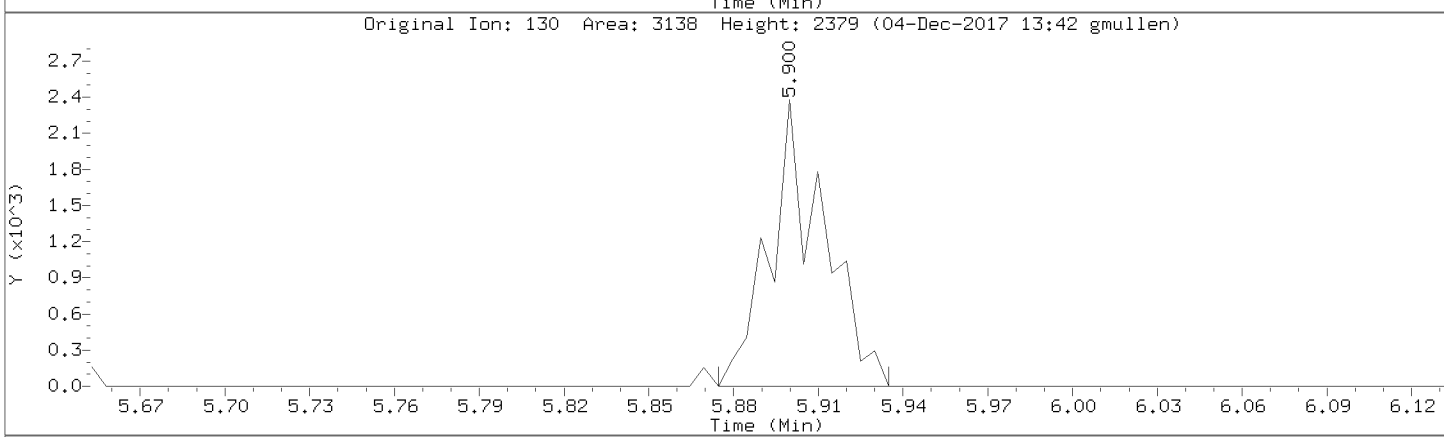
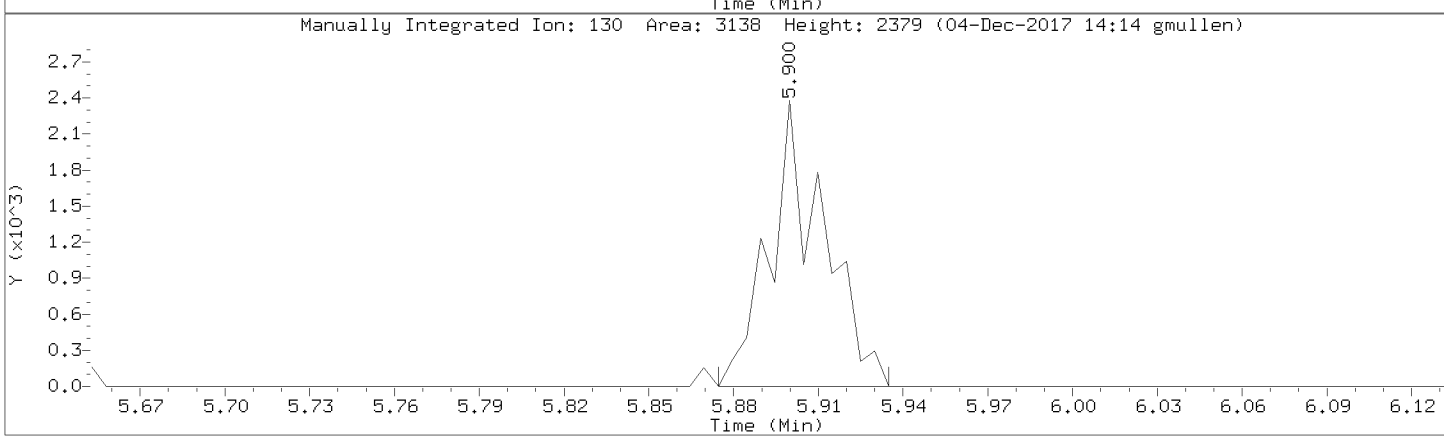
Injection Date: 04-DEC-2017 11:34
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Bromochloromethane Review Code: LT
CAS Number: 74-97-5









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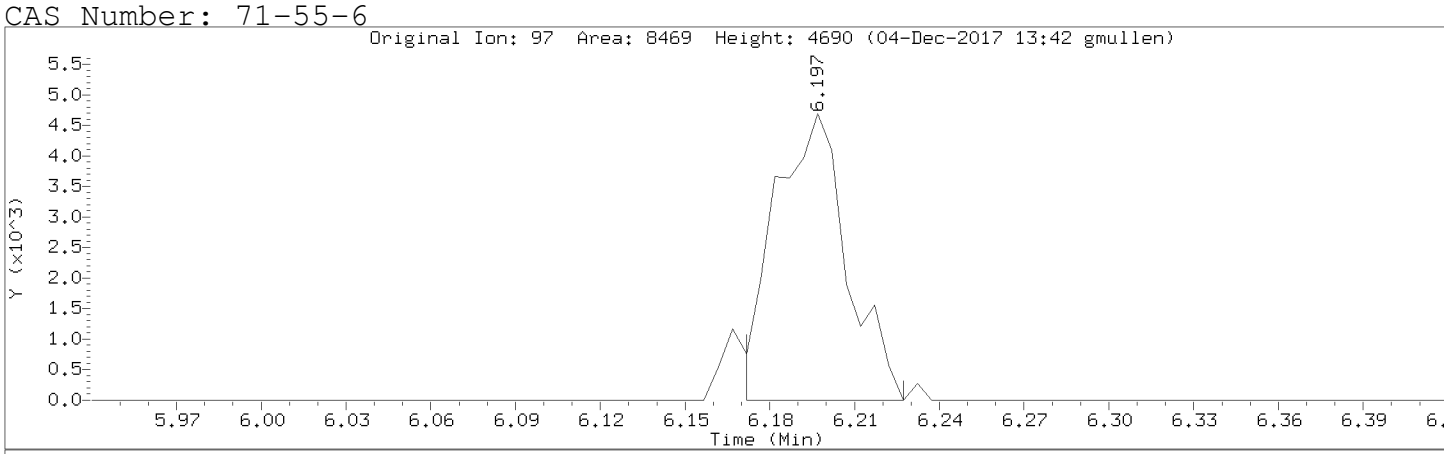
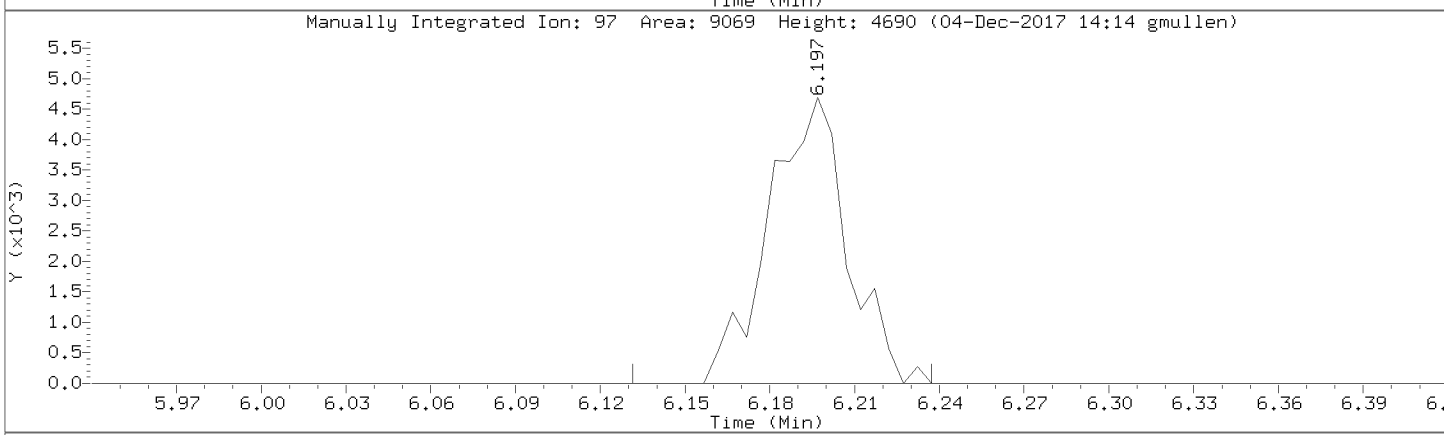
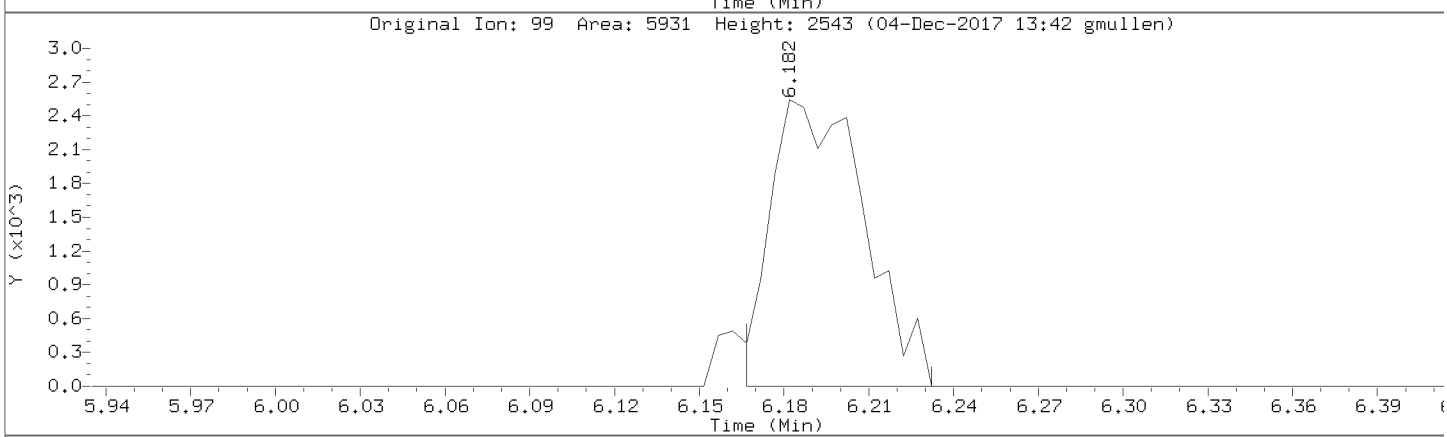
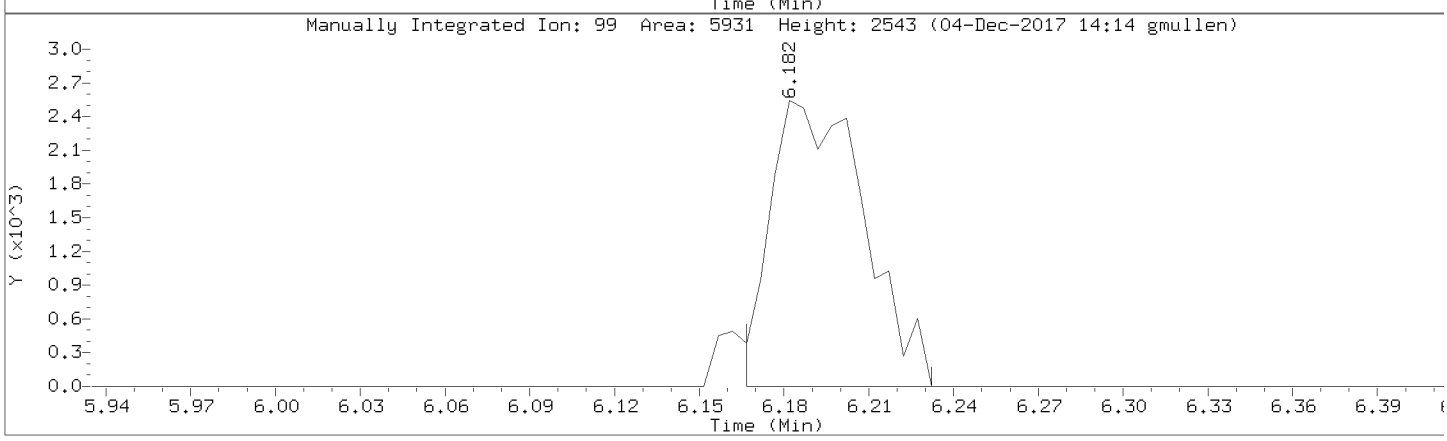
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 1,1,1-Trichloroethane Review Code: LT
CAS Number: 71-55-6









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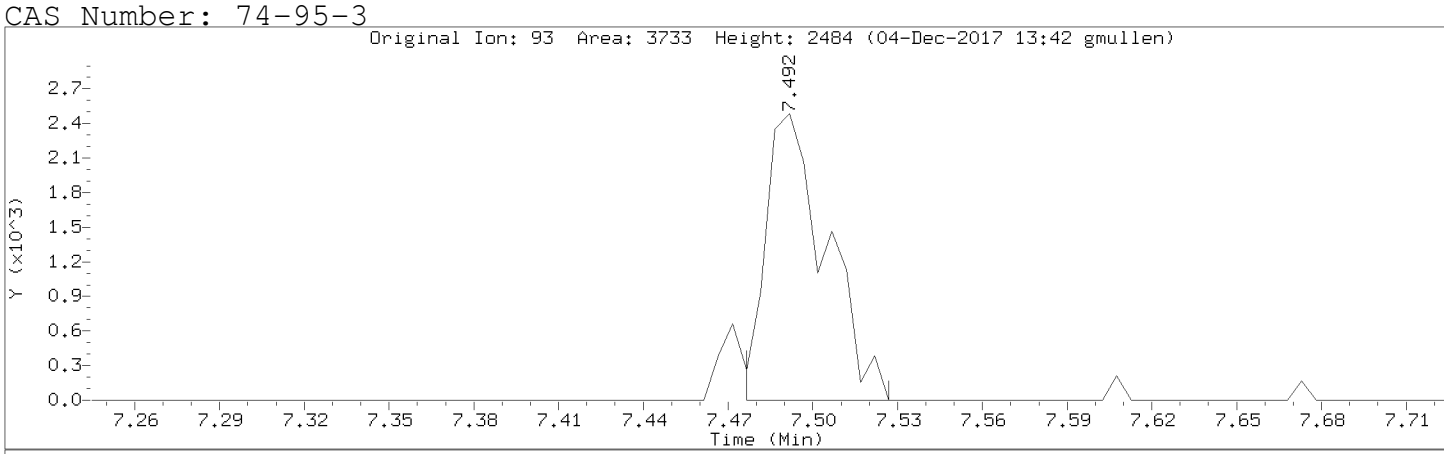
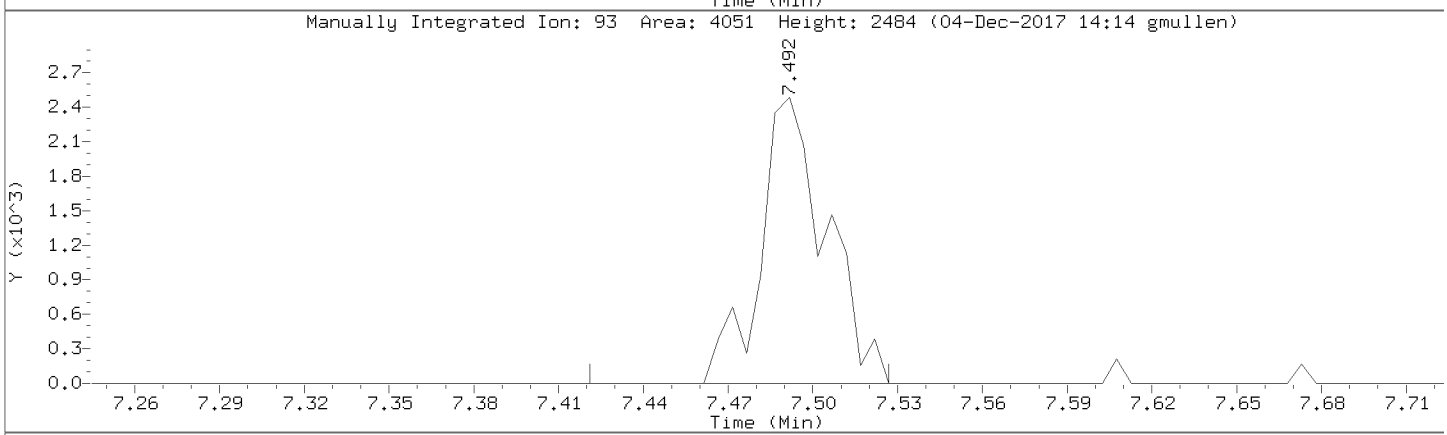
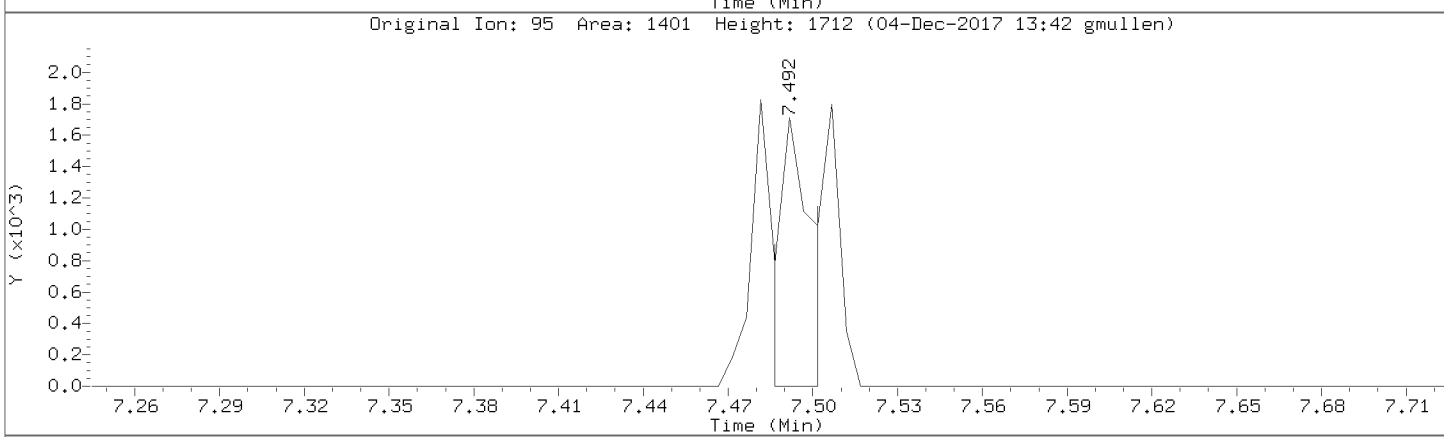
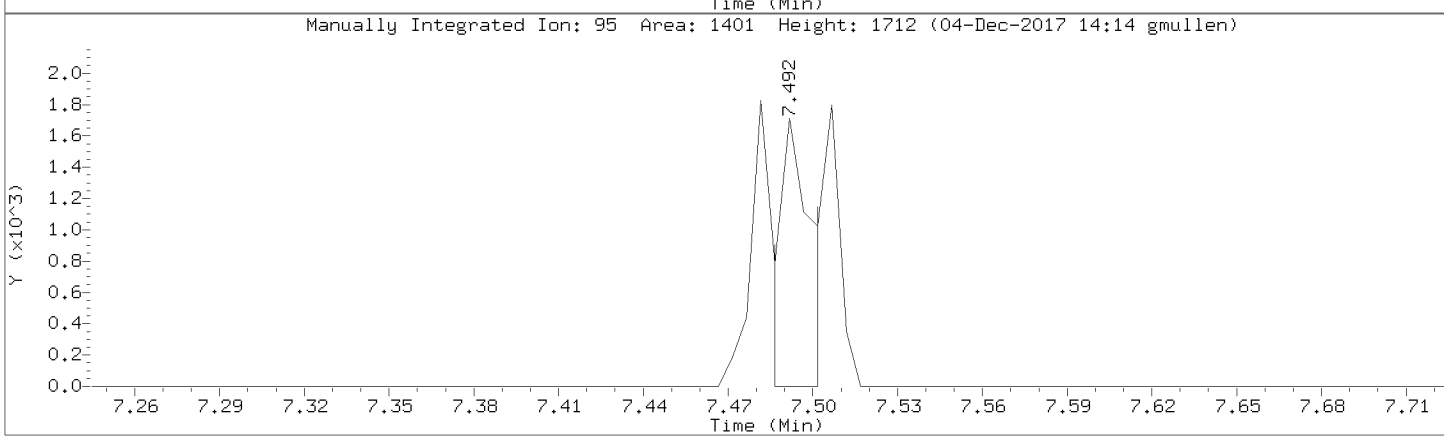
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Dibromomethane Review Code: LT
CAS Number: 74-95-3









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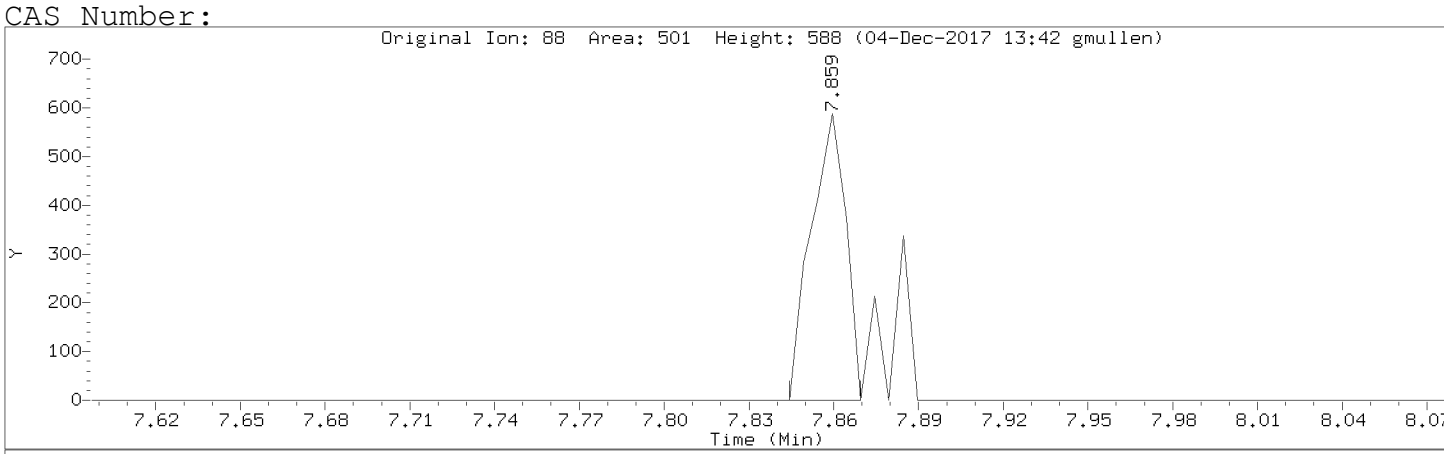
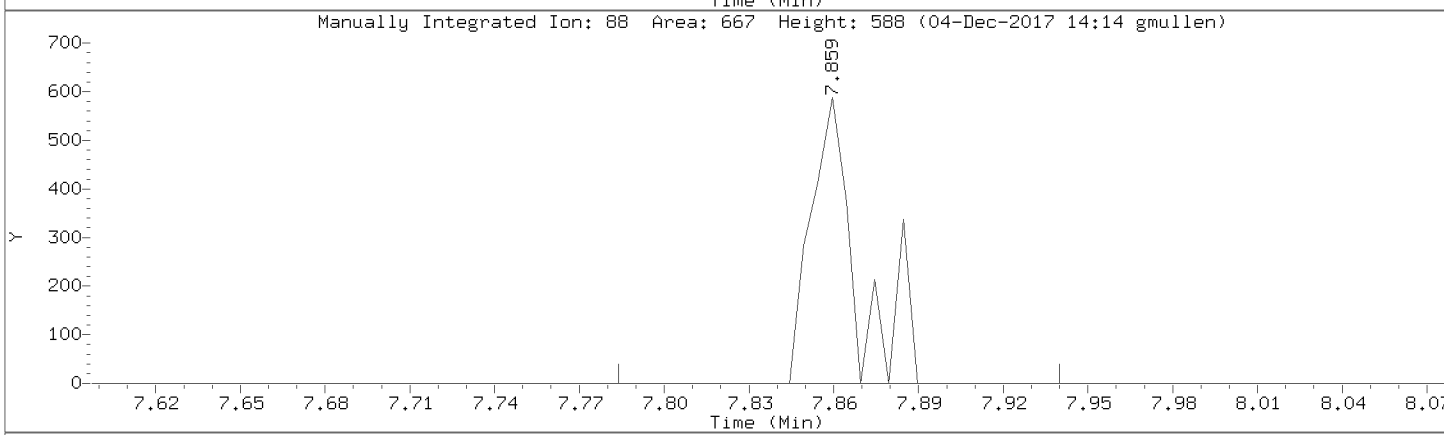
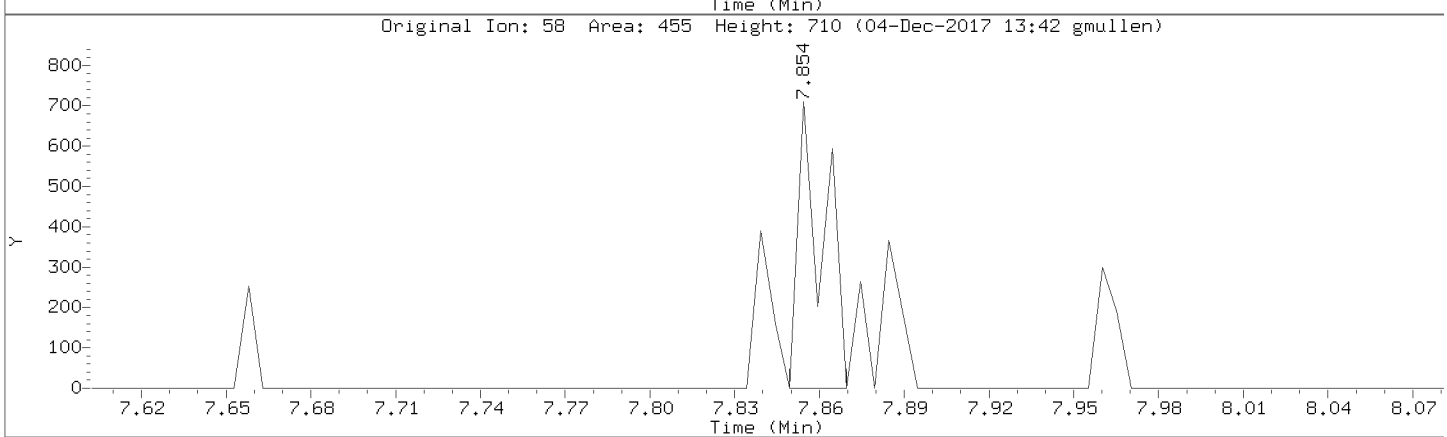
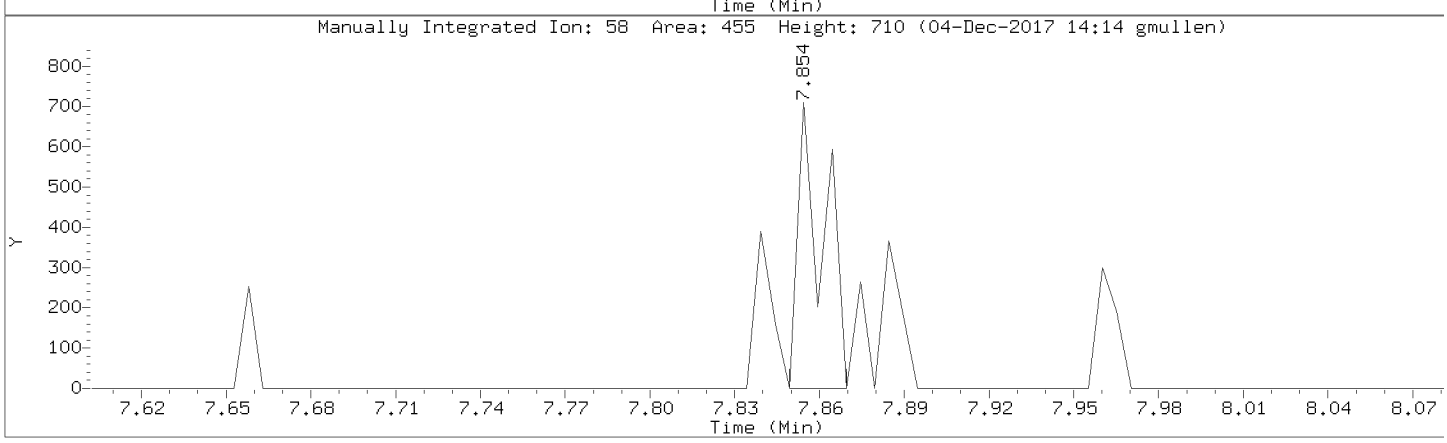
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 1,4-Dioxane (p-Dioxane) Review Code: LT
CAS Number:









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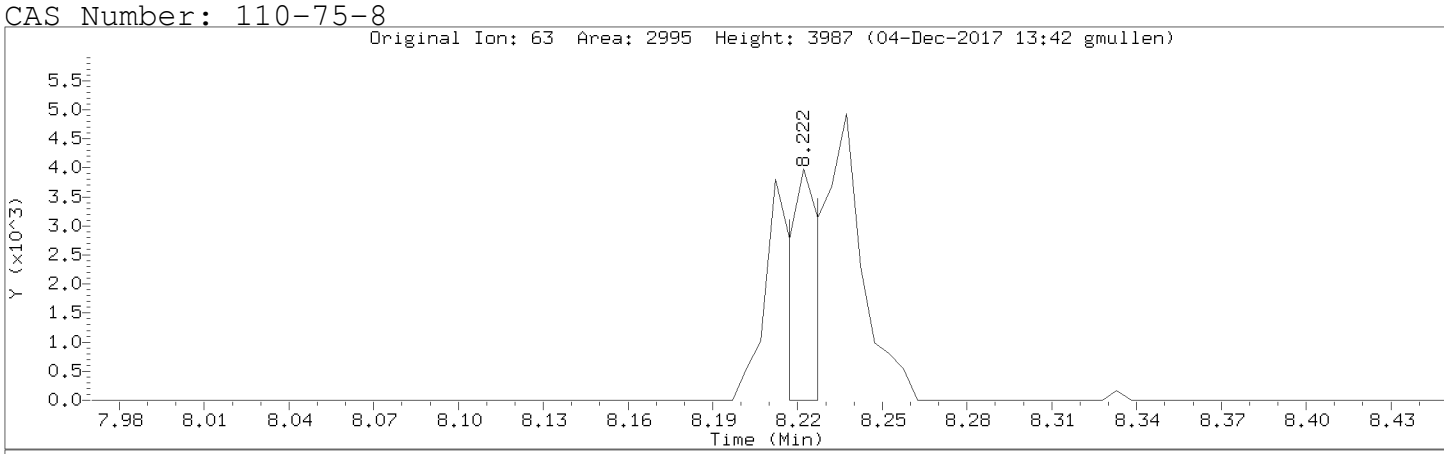
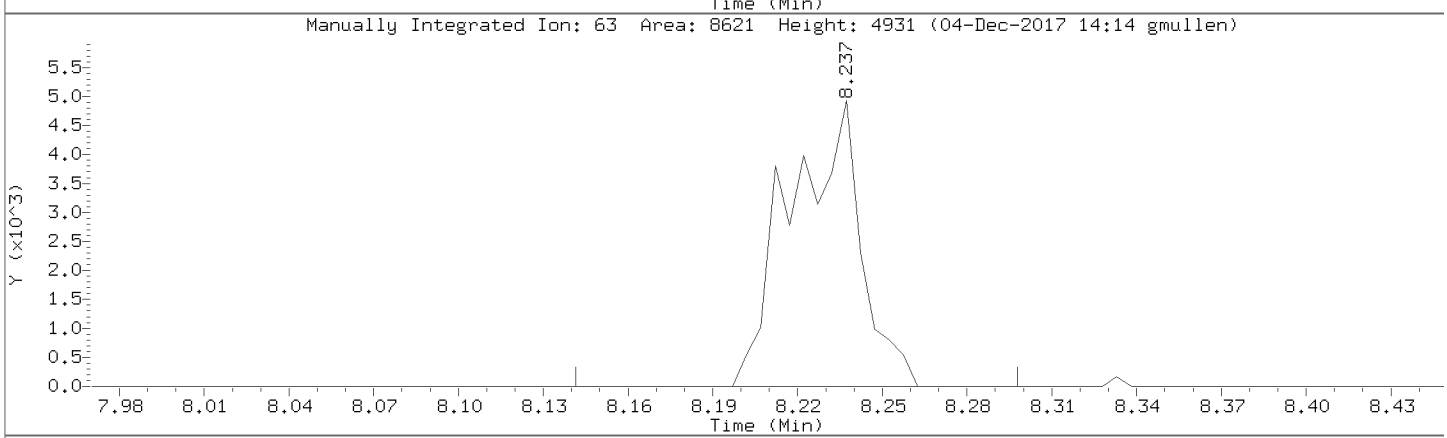
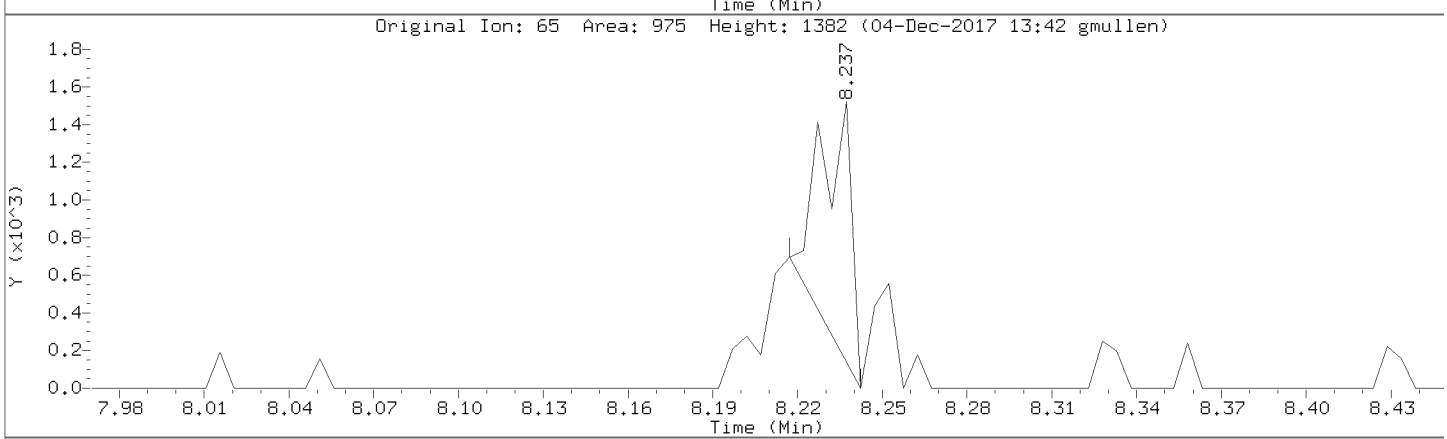
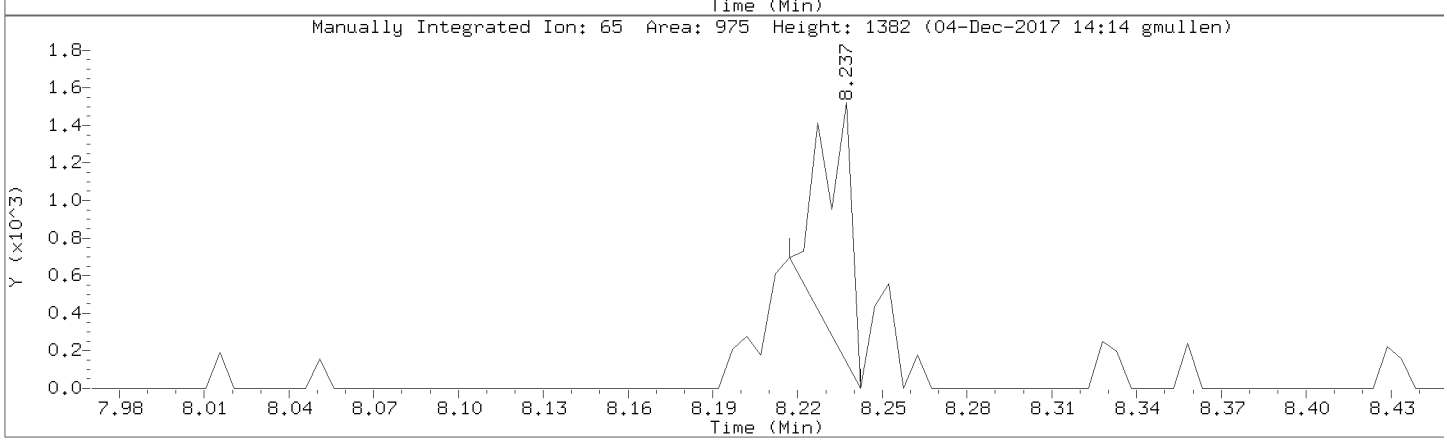
Injection Date: 04-DEC-2017 11:34
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 2-Chloroethyl vinyl ether Review Code: LT
CAS Number: 110-75-8









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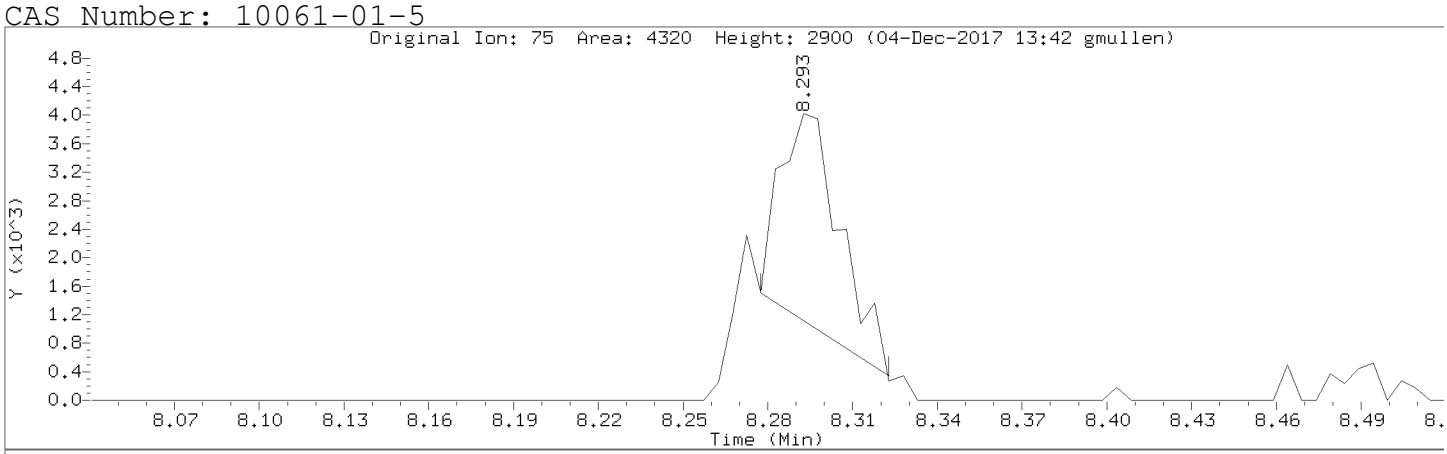
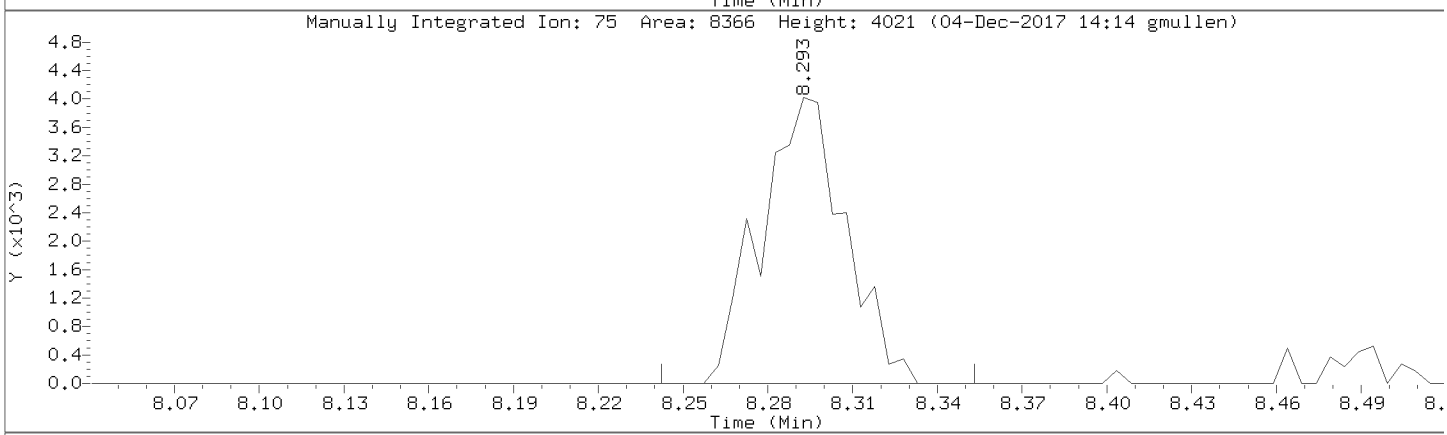
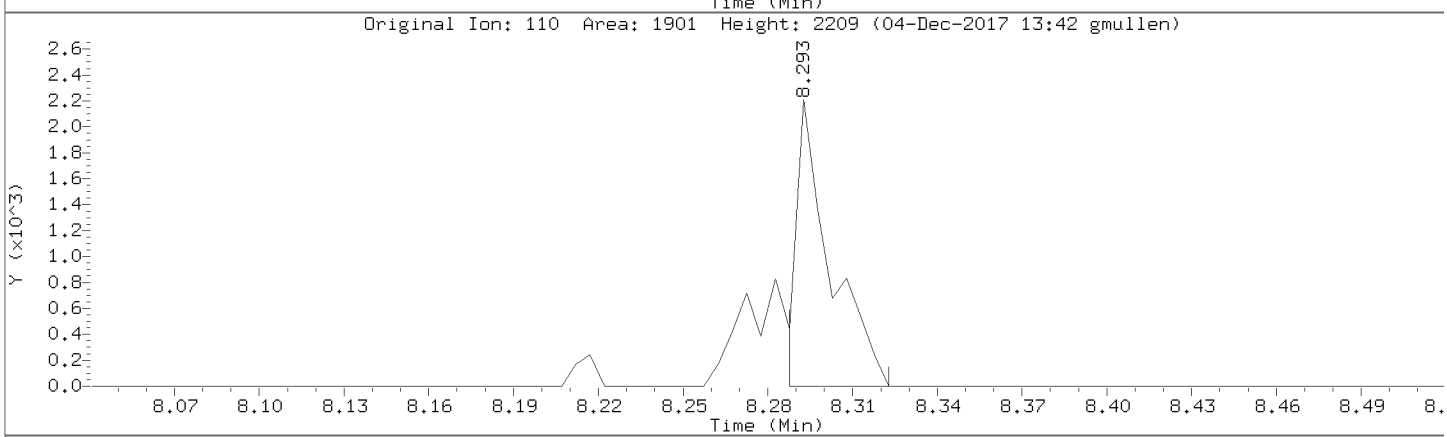
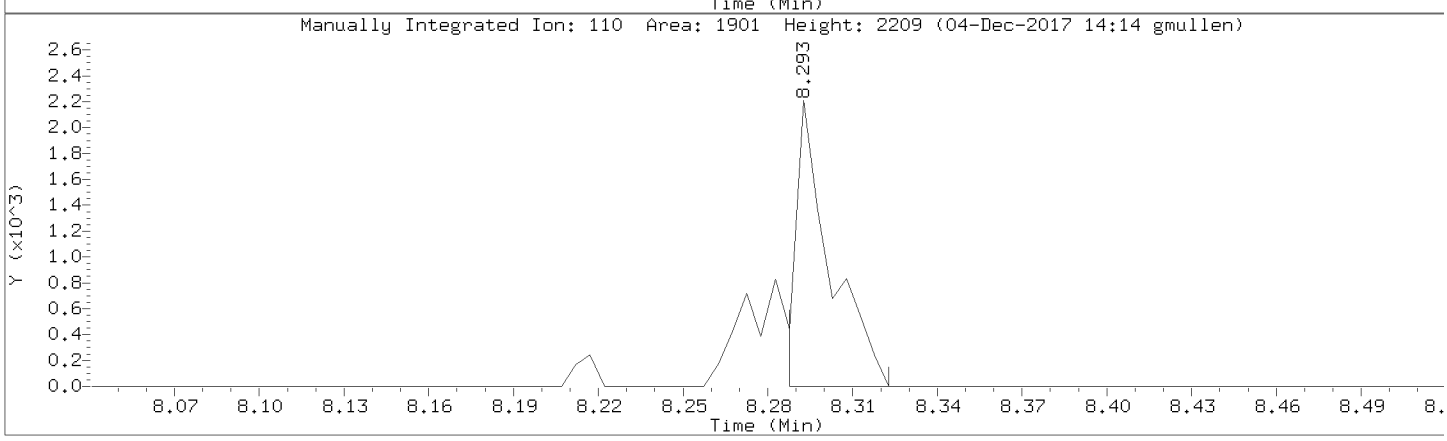
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: cis-1,3-Dichloropropene Review Code: LT
CAS Number: 10061-01-5









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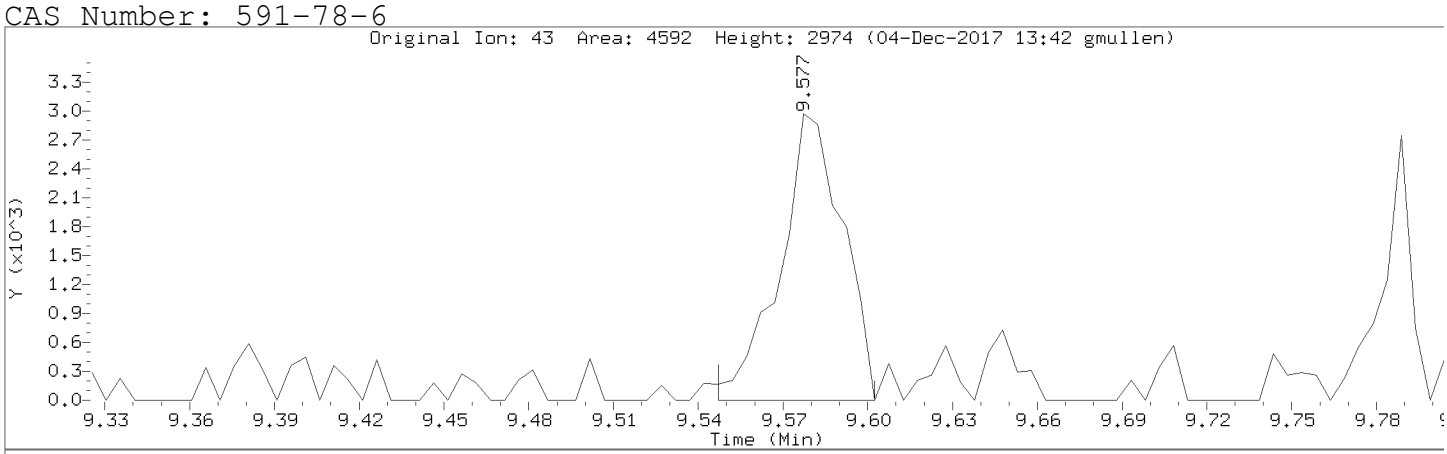
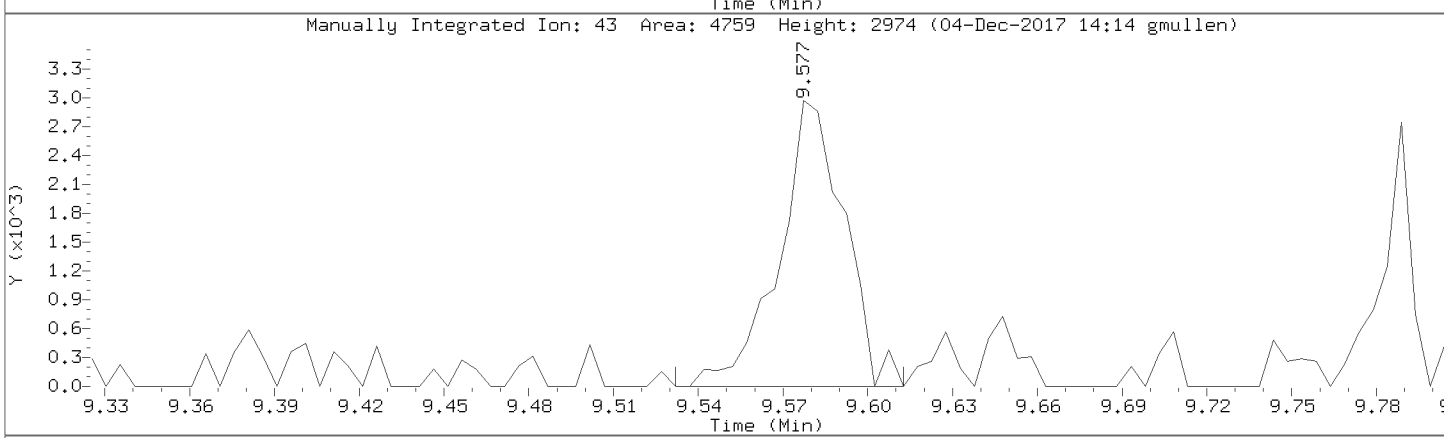
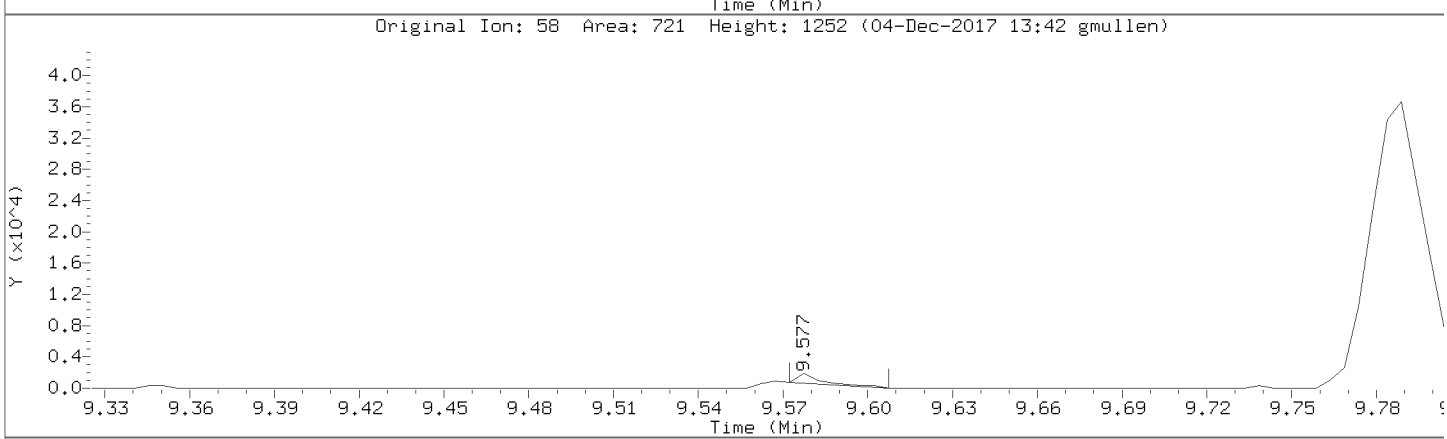
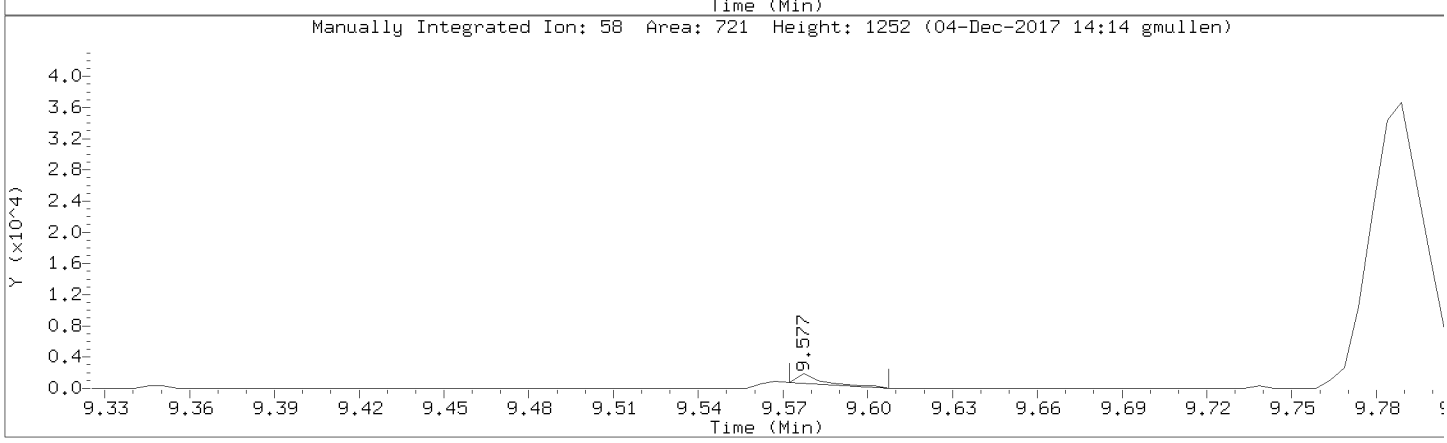
Injection Date: 04-DEC-2017 11:34
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: 2-Hexanone Review Code: LT
CAS Number: 591-78-6









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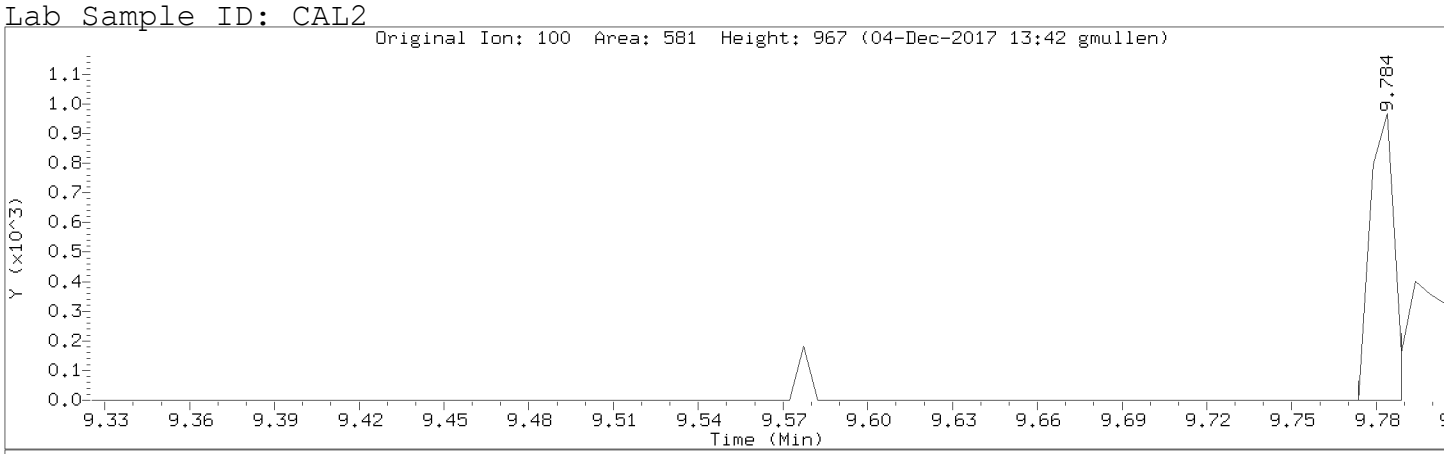
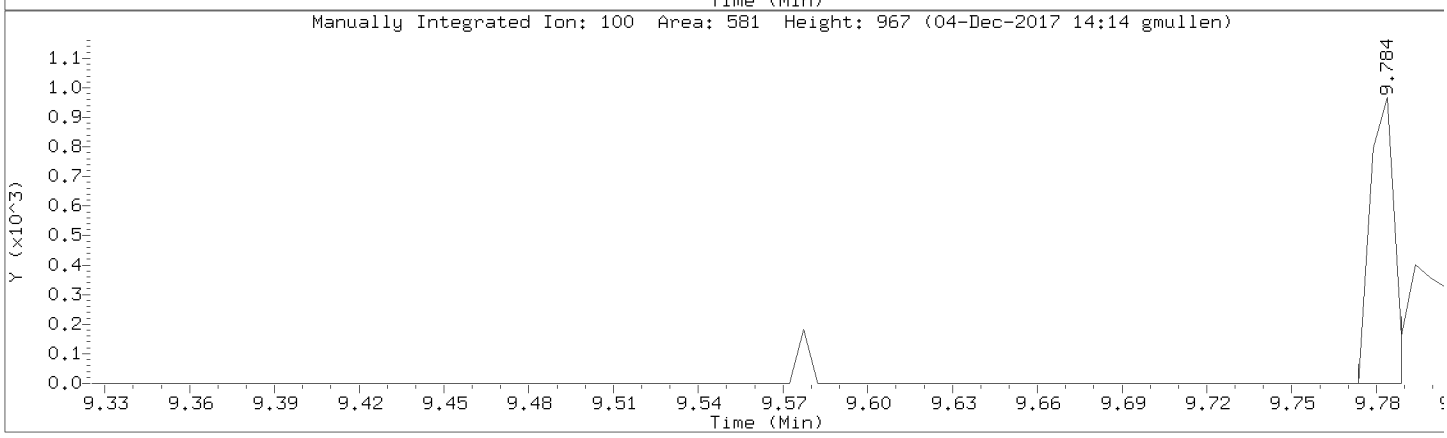
Instrument: 20msvd.i
Lab Sample ID: CAL2





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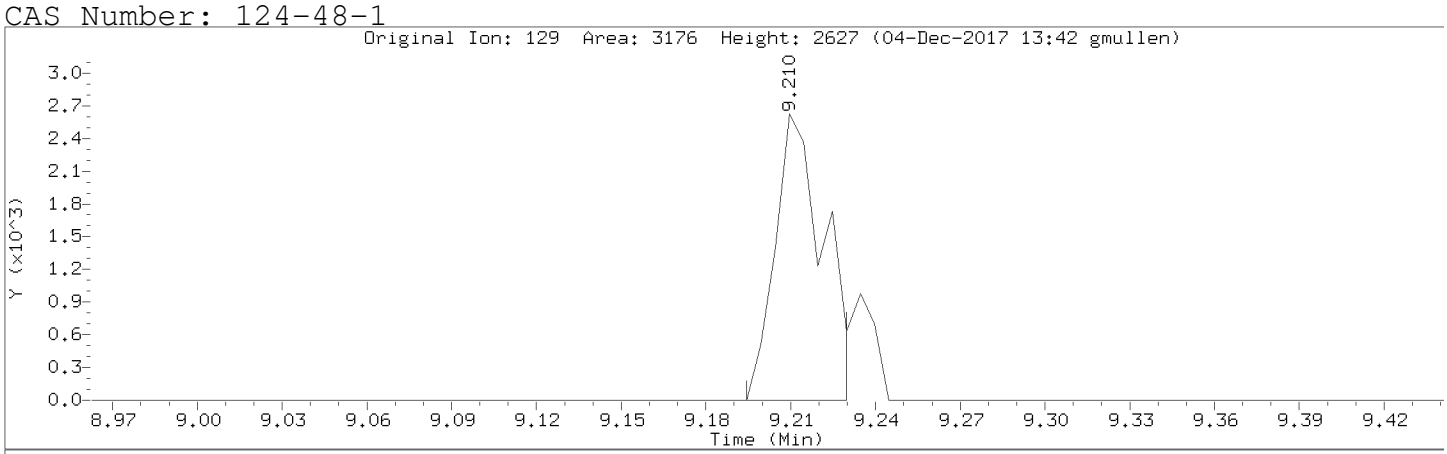
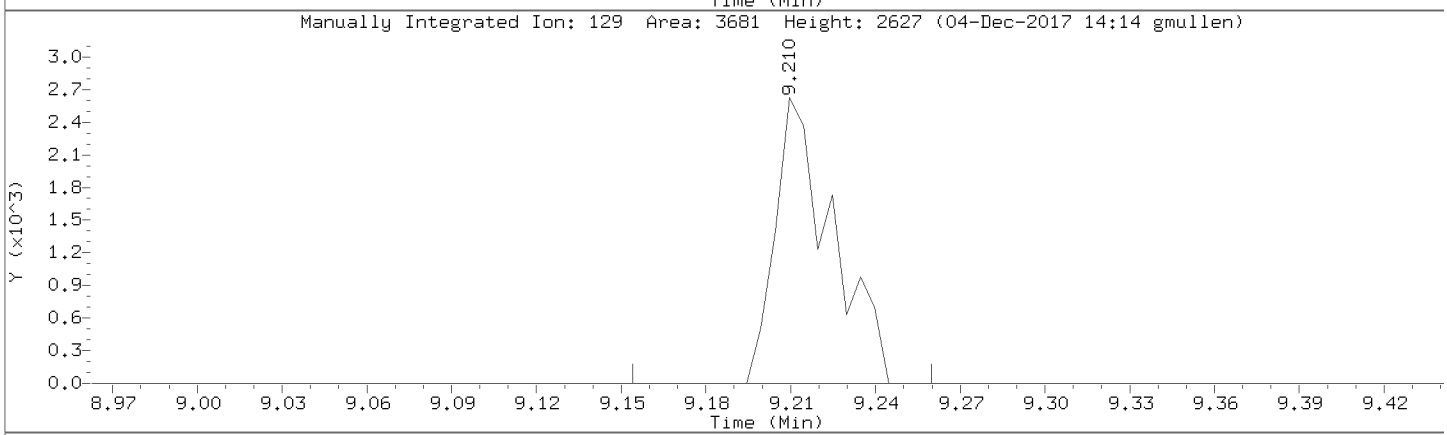
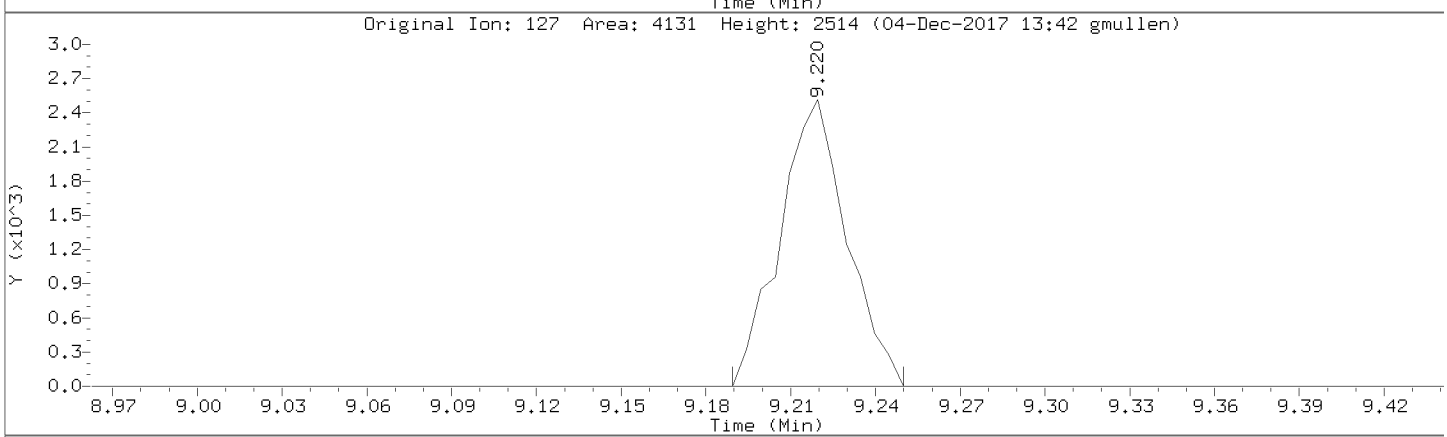
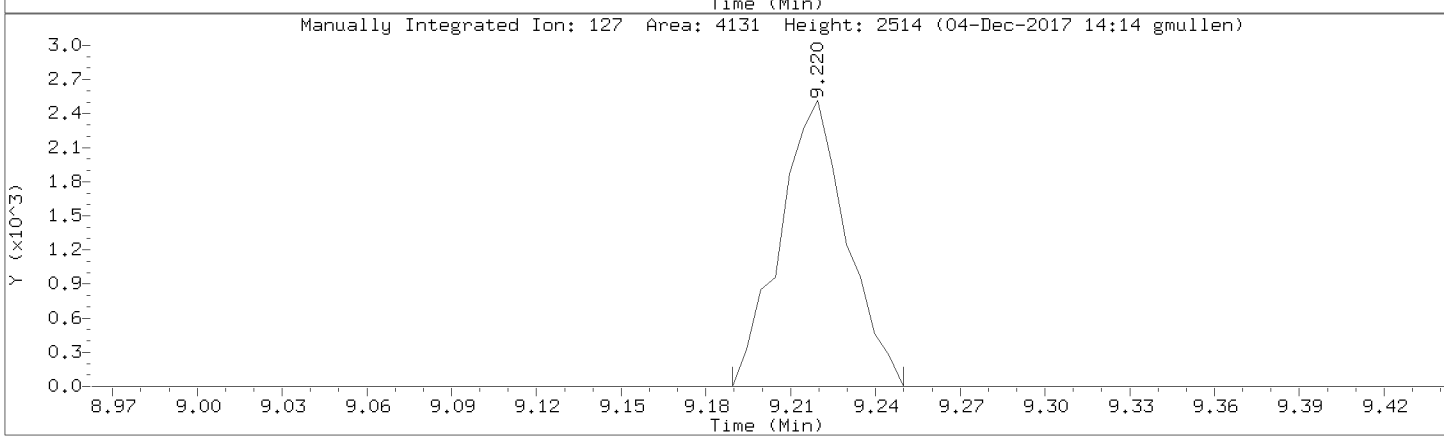
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Dibromochloromethane Review Code: LT
CAS Number: 124-48-1









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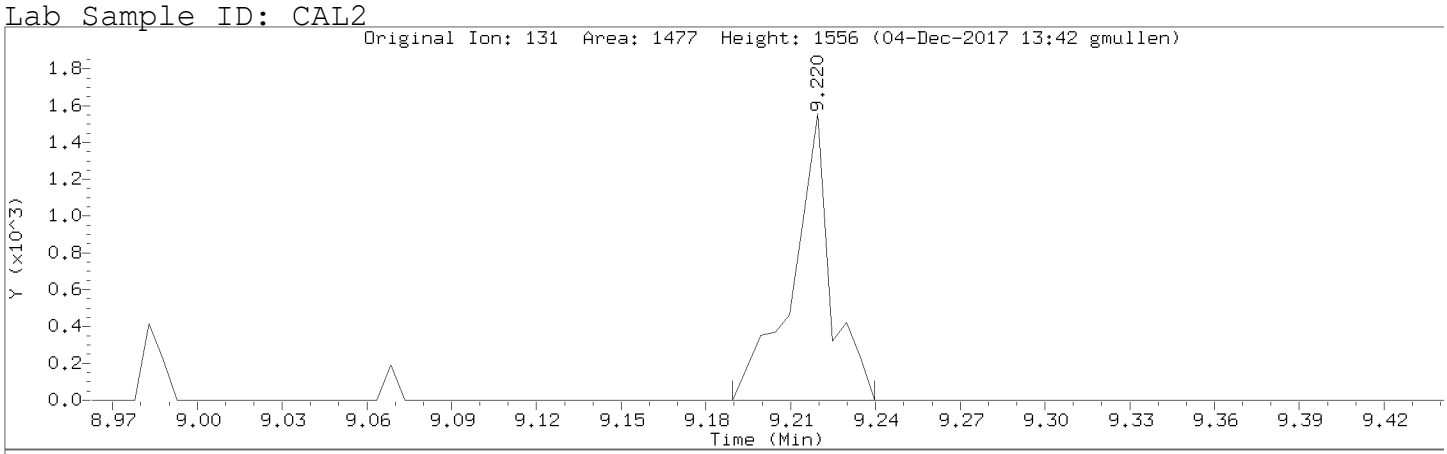

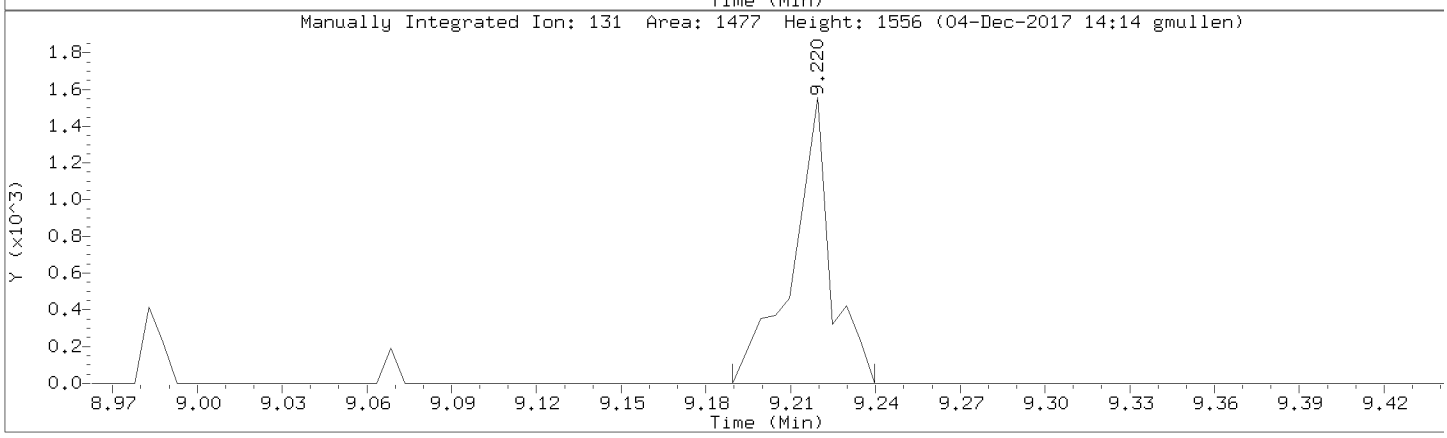

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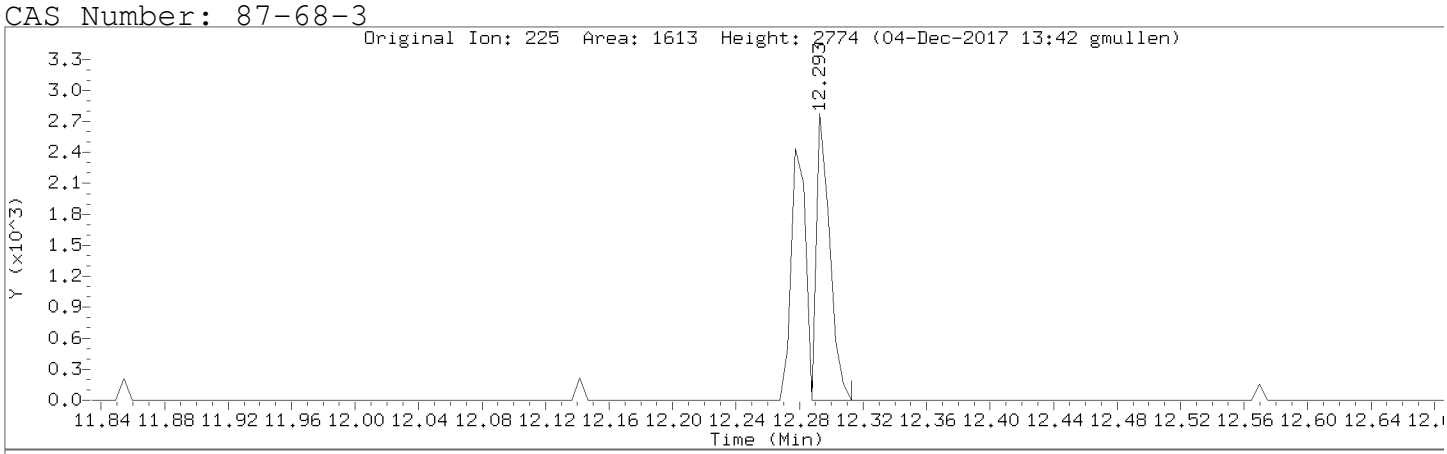
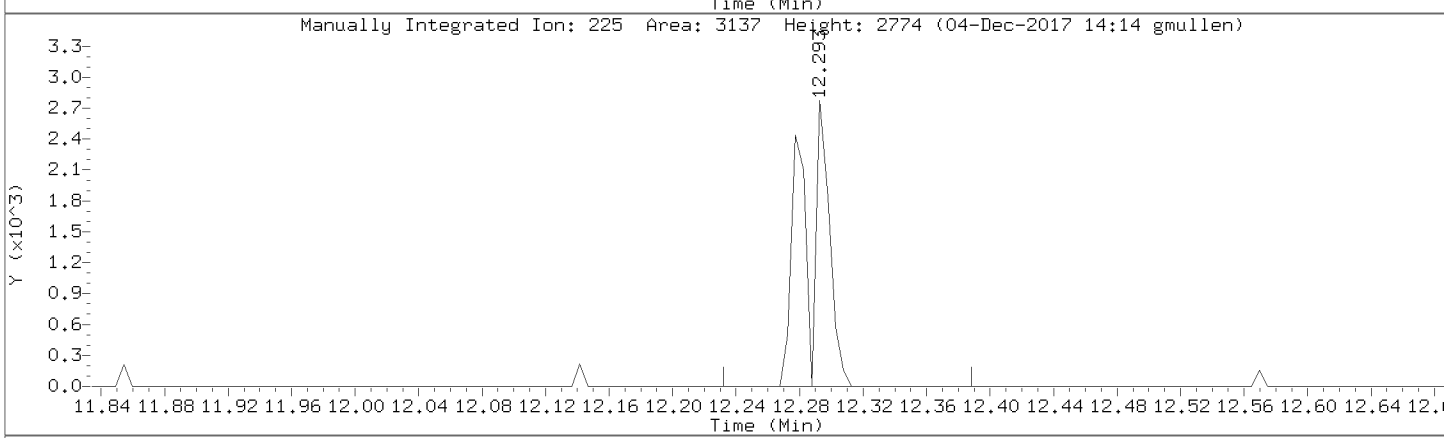
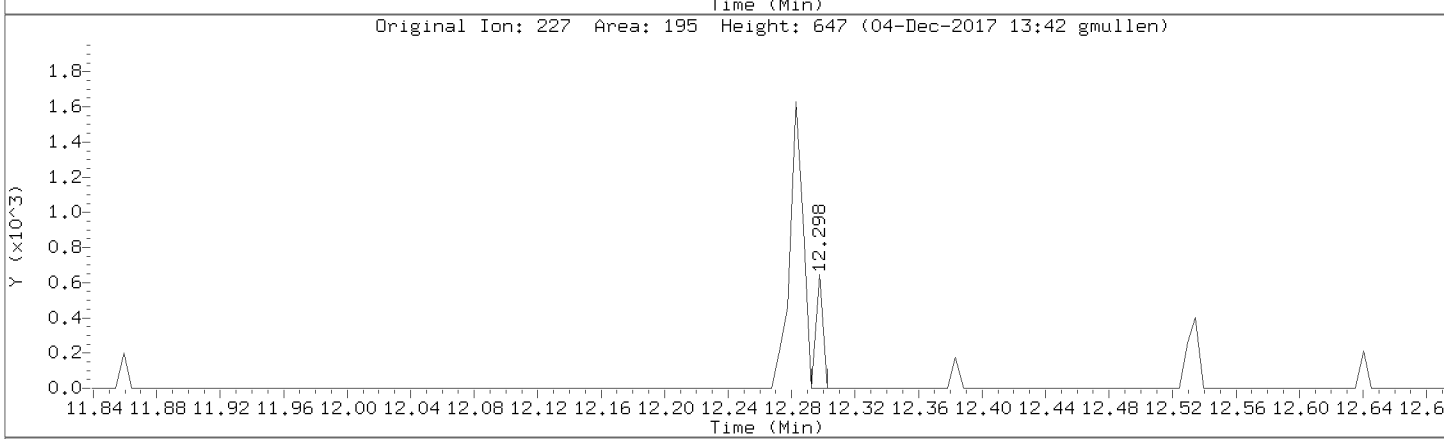
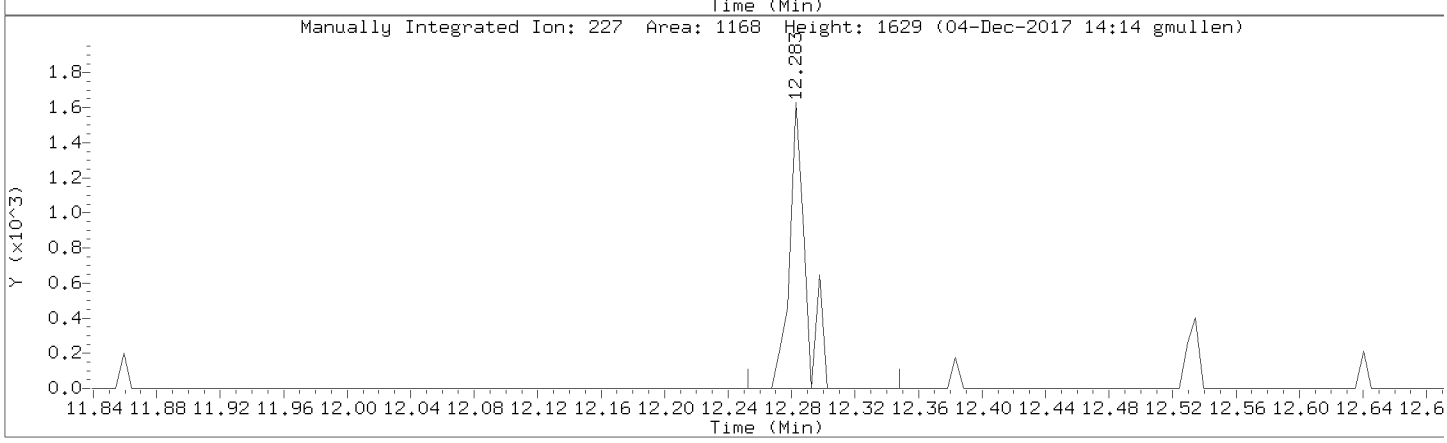
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Hexachloro-1,3-butadiene Review Code: LT
CAS Number: 87-68-3









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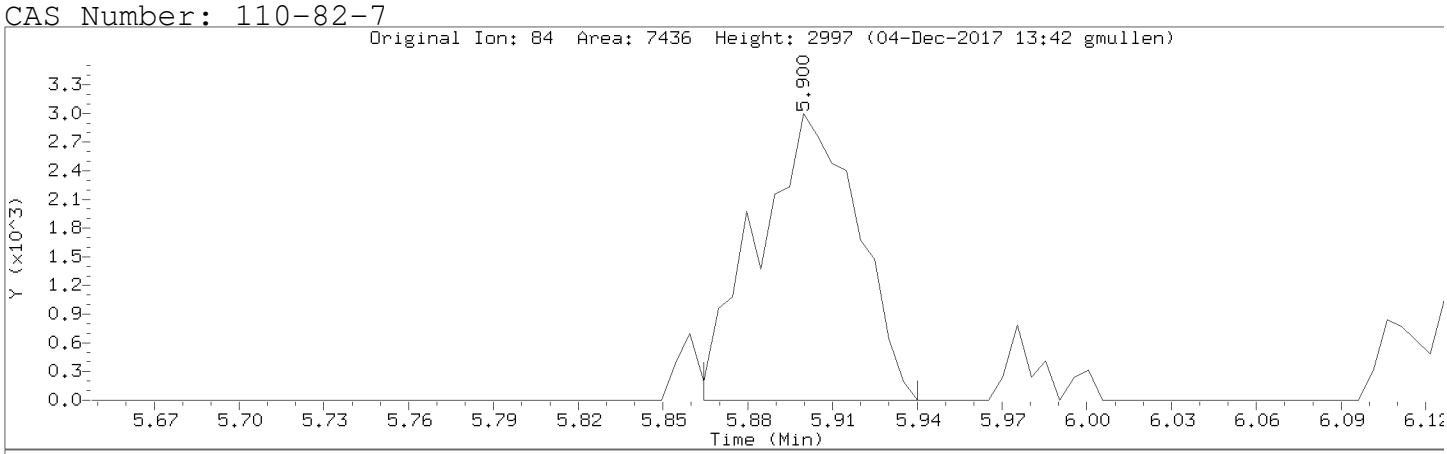
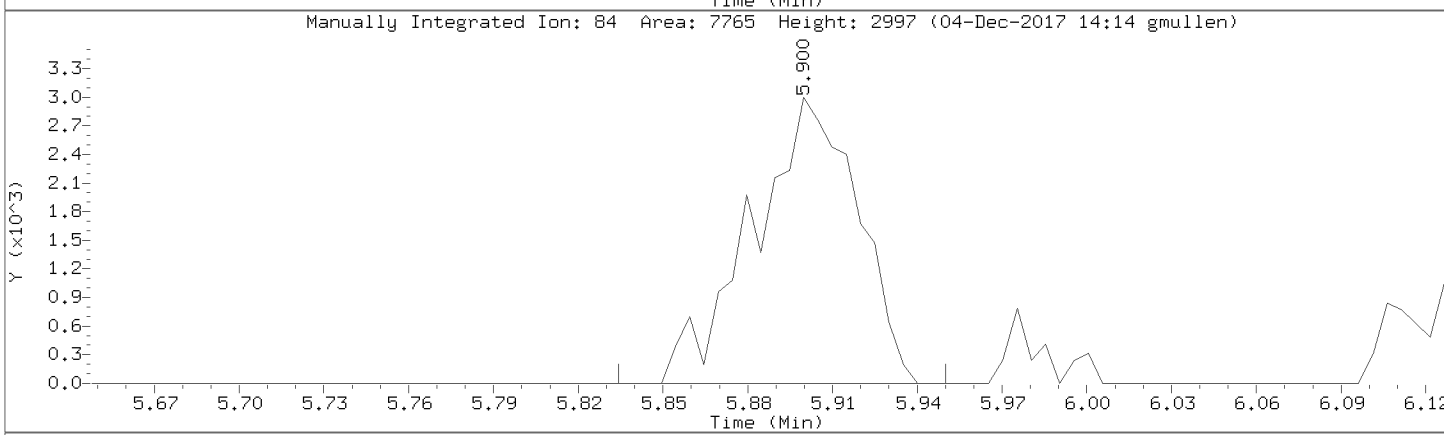
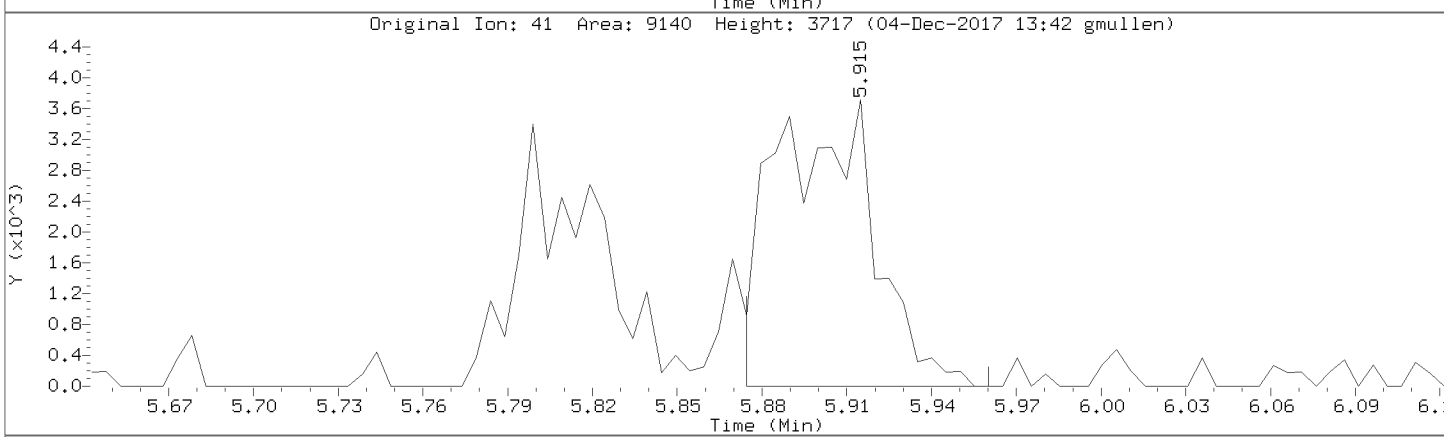
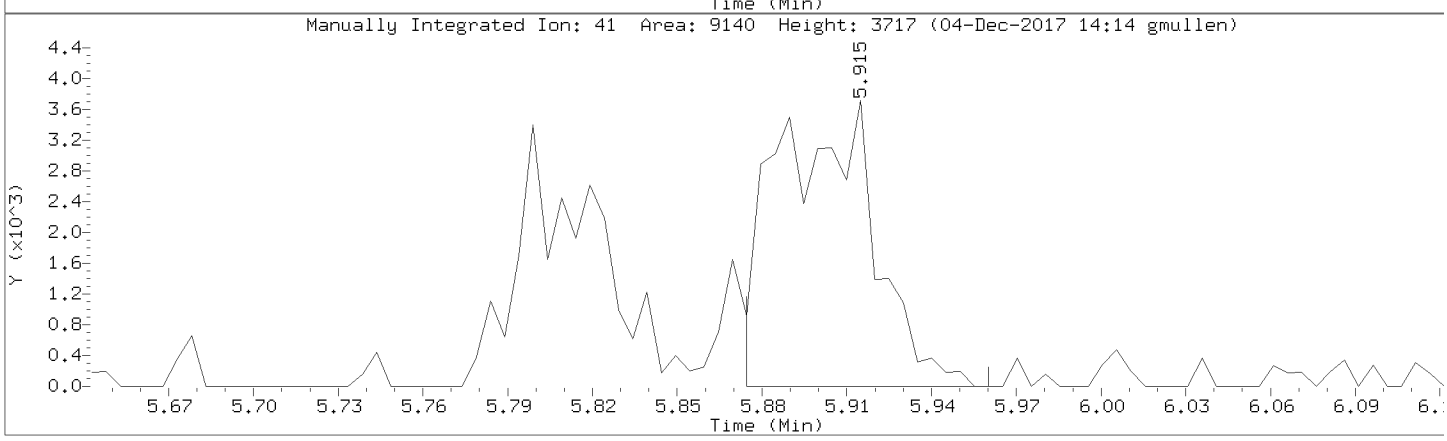
Injection Date: 04-DEC-2017 11:34
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Cyclohexane Review Code: LT
CAS Number: 110-82-7









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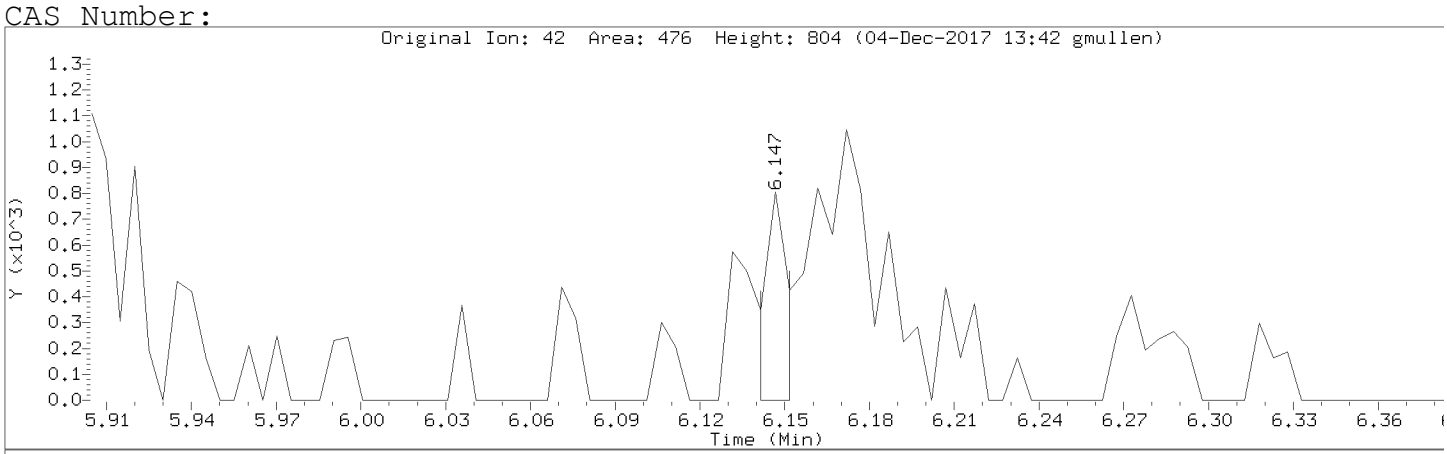
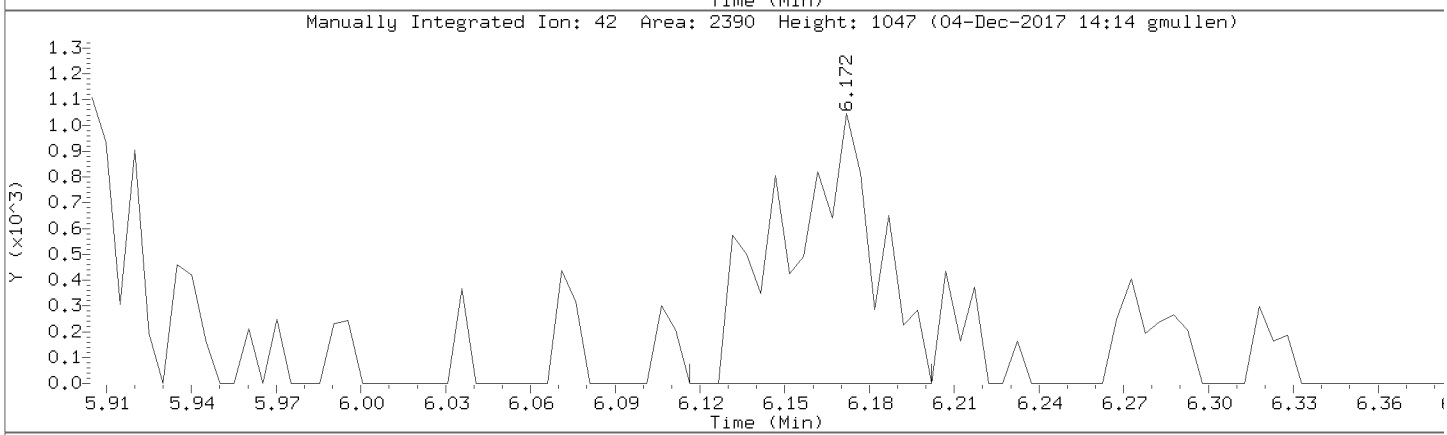
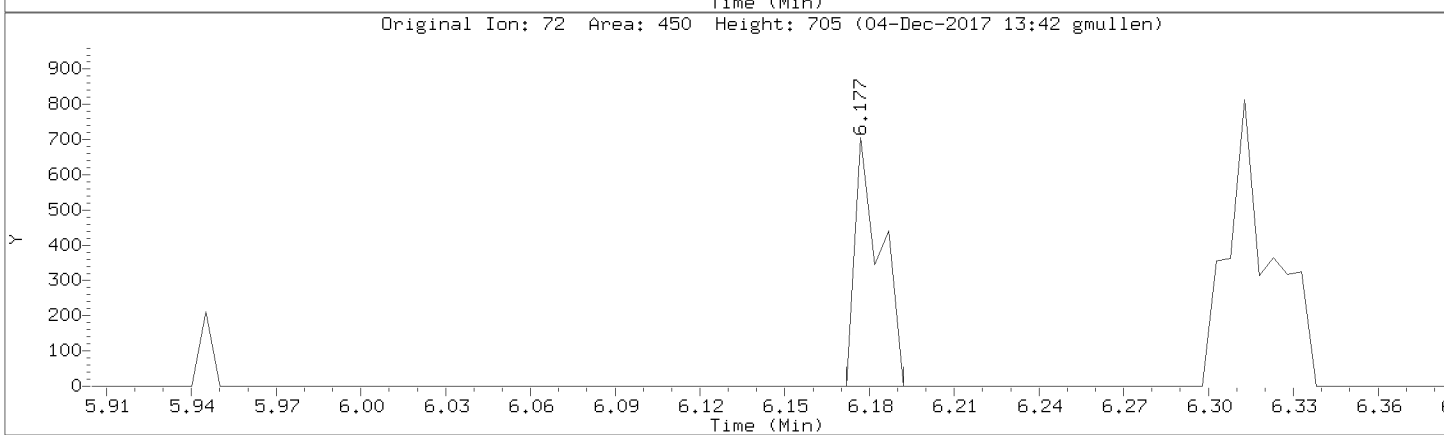
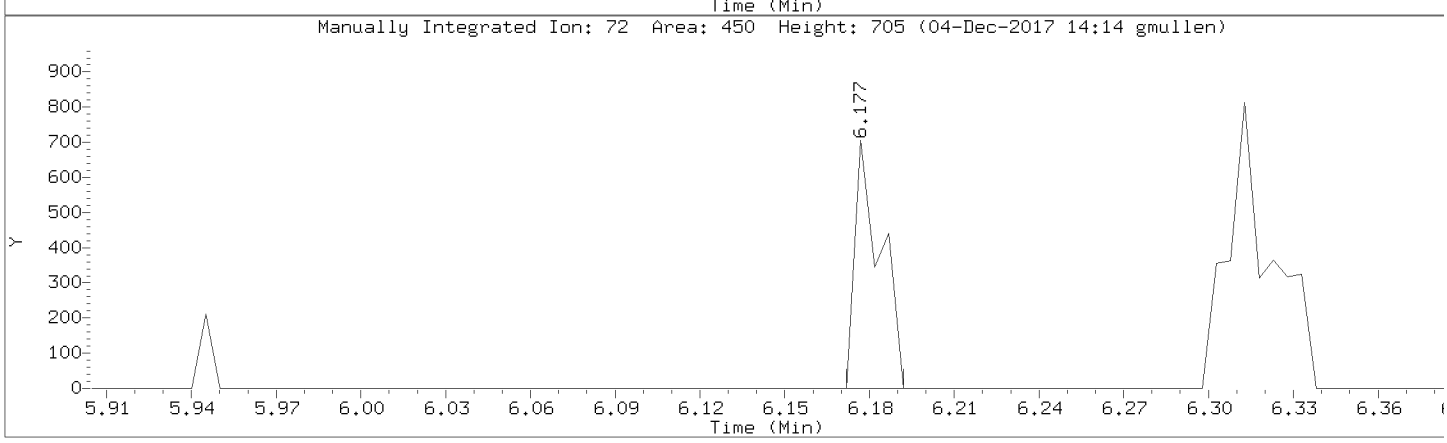
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Tetrahydrofuran Review Code: LT
CAS Number:









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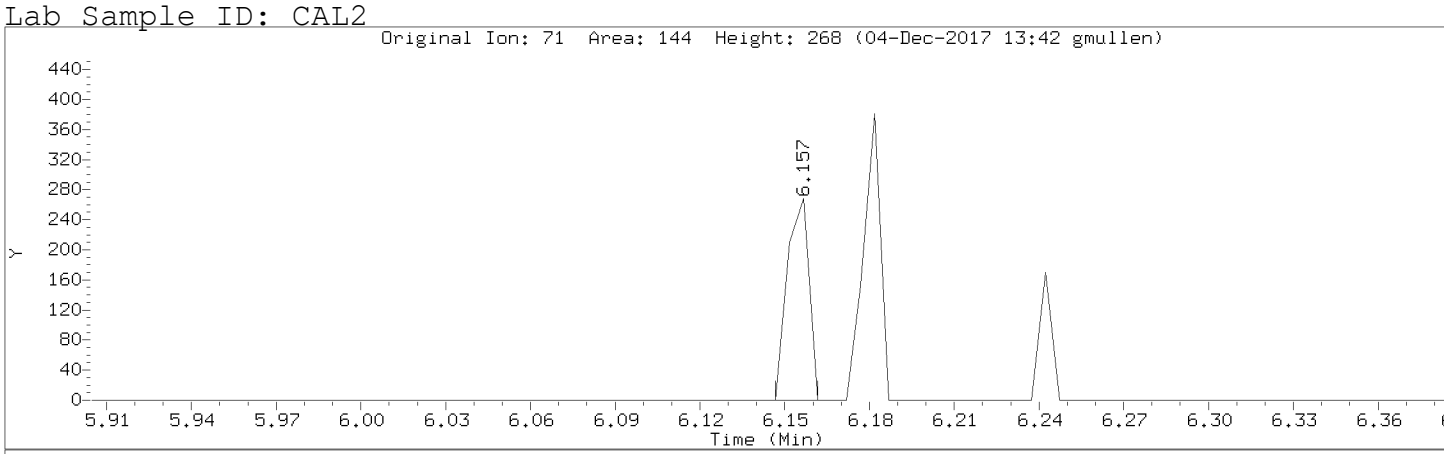

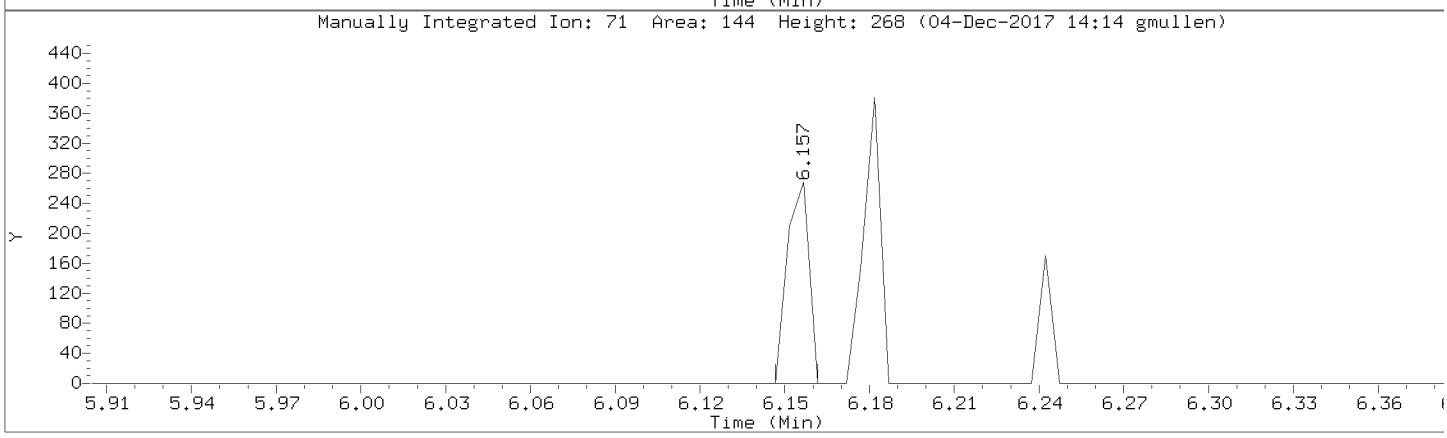

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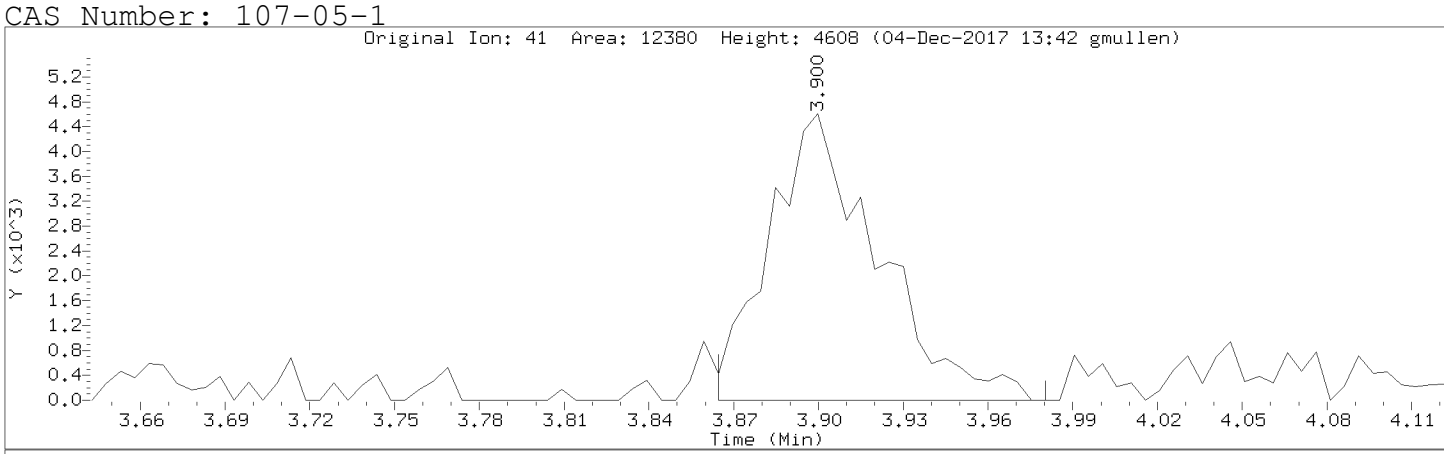
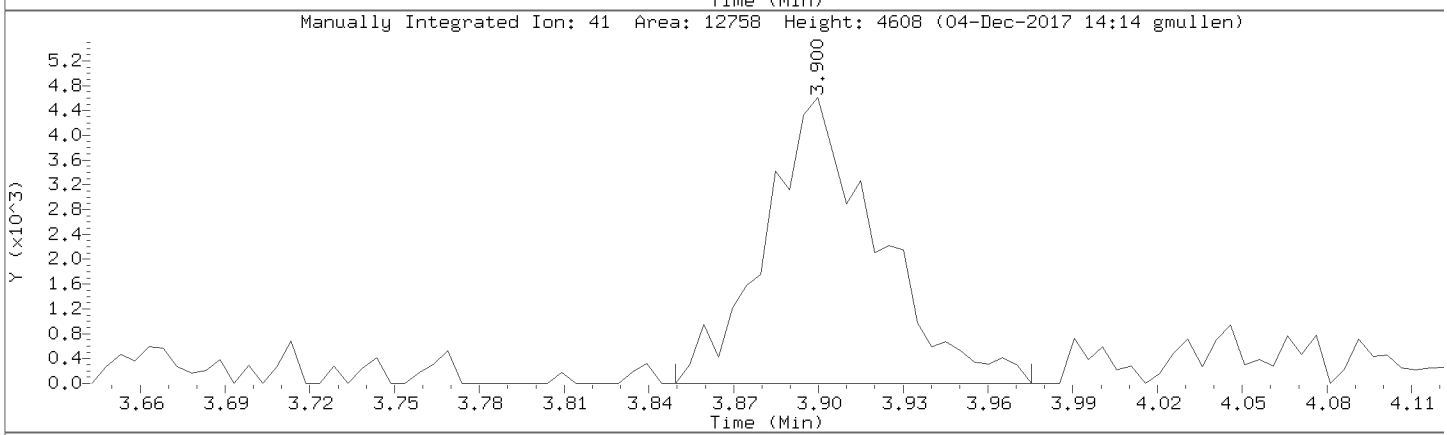
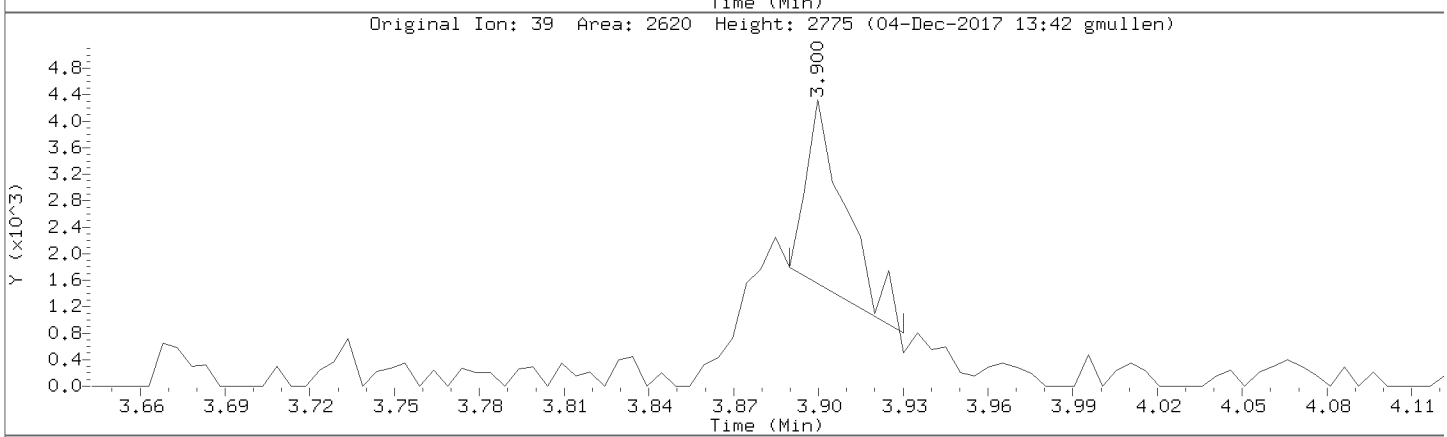
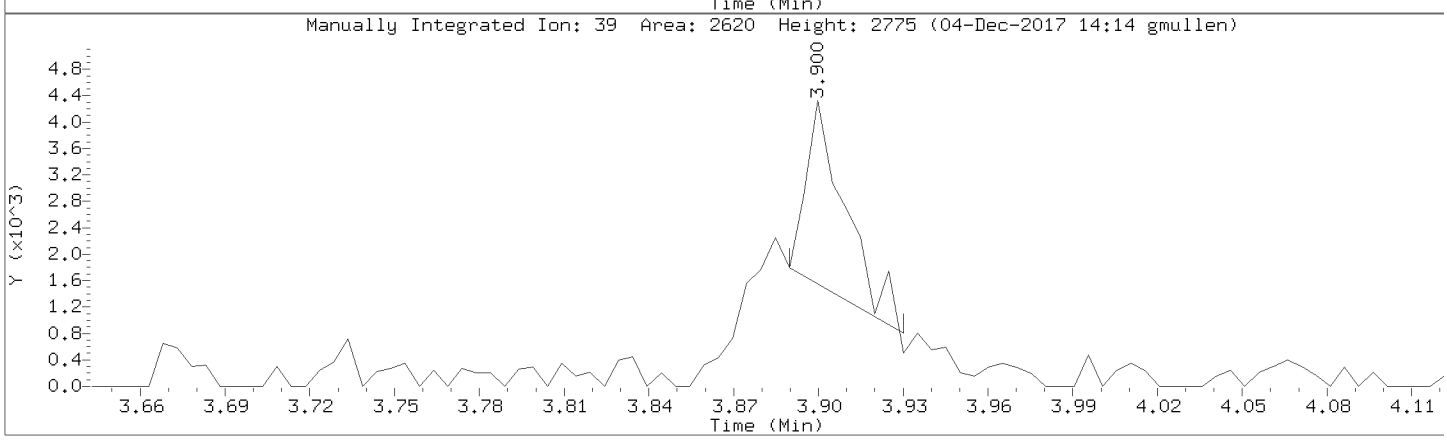
Instrument: 20msvd.i
Lab Sample ID: CAL2

Compound: Allyl chloride Review Code: LT
CAS Number: 107-05-1









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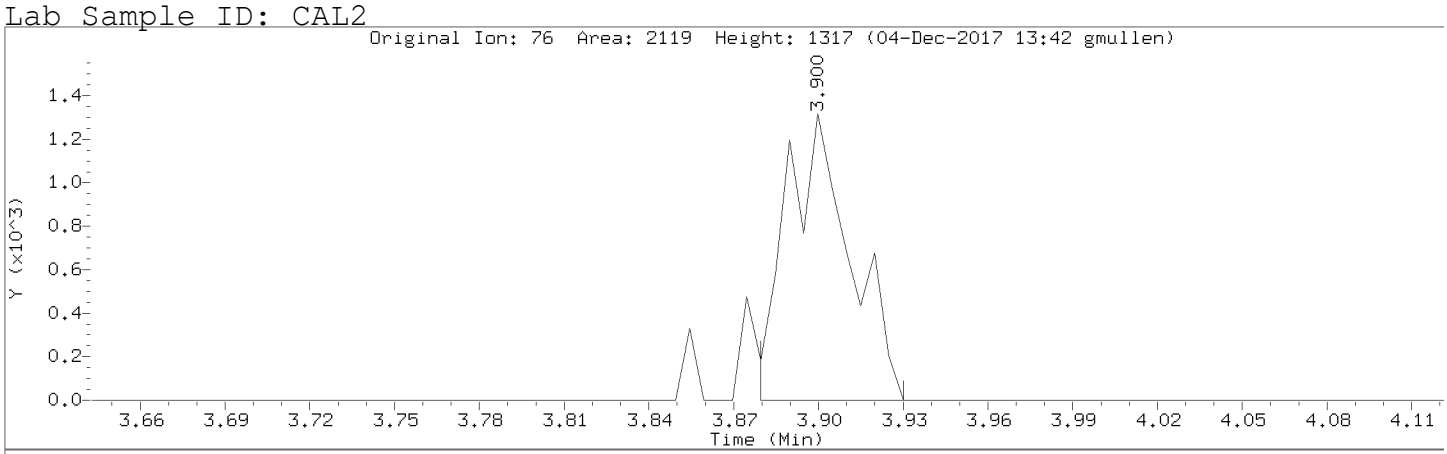
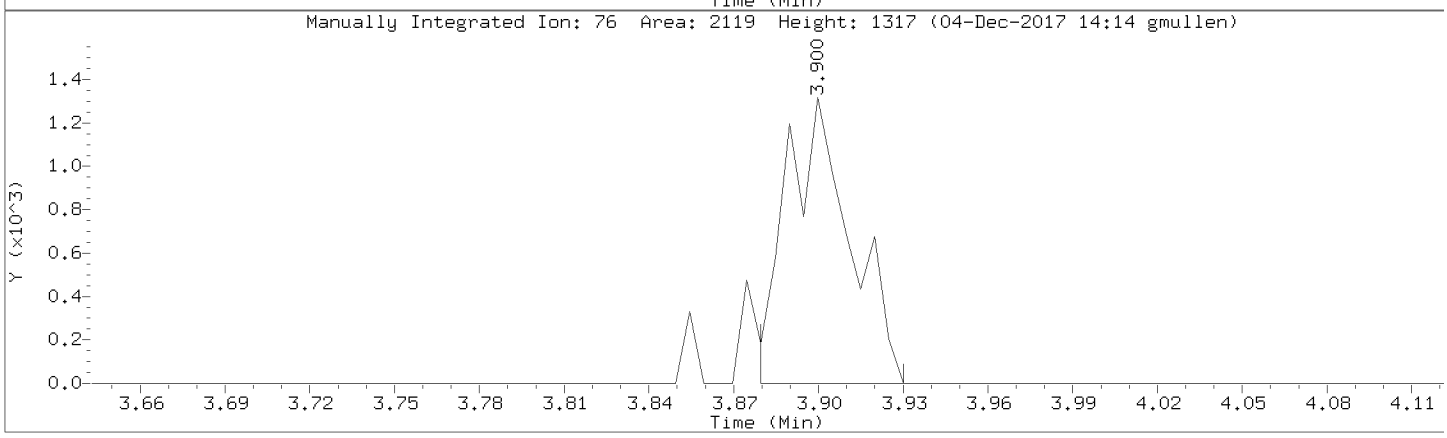




Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d11.d
Lab Smp Id: CAL3 Client Smp ID: CAL3
Inj Date : 04-DEC-2017 11:51
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal3,54929:1
Misc Info : 7846
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\120417.b\d120417sim.m
Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 11:51 Cal File: 1204d11.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.708	1.703	(0.257)	41233	5.00000	5.00(M)
2 Chloromethane	50	1.894	1.894	(0.285)	67291	5.00000	4.86
3 Vinyl chloride	62	1.990	1.990	(0.299)	60528	5.00000	4.63
4 Bromomethane	94	2.338	2.338	(0.352)	27746	5.00000	4.72
5 Chloroethane	64	2.494	2.484	(0.375)	26720	5.00000	4.61(H)
6 Trichlorofluoromethane	101	2.655	2.640	(0.399)	49734	5.00000	4.72
7 1,1-Dichloroethene	96	3.250	3.250	(0.489)	29799	5.00000	5.02
8 Carbon disulfide	76	3.270	3.275	(0.492)	93667	5.00000	4.65
9 1,1,2-Trichlorotrifluoroethane	101	3.320	3.325	(0.499)	31775	5.00000	4.59(M)
10 Iodomethane	142	3.431	3.431	(0.516)	63785	5.00000	4.88
11 Acrolein	56	3.713	3.713	(0.558)	8006	5.00000	6.81(M)
12 Allyl chloride	41	3.909	3.894	(0.588)	68174	5.00000	4.81
13 Methylene Chloride	84	4.051	4.046	(0.609)	33764	5.00000	5.07
14 Acetone	43	4.156	4.151	(0.625)	10793	5.00000	6.05
15 trans-1,2-Dichloroethene	96	4.282	4.277	(0.644)	32493	5.00000	4.86
16 Methyl Acetate	74	4.333	4.323	(0.652)	3094	5.00000	4.15(M)
17 n-Hexane	57	4.388	4.393	(0.660)	67860	5.00000	4.79
18 Methyl-tert-butyl ether	73	4.454	4.449	(0.670)	63614	5.00000	4.89
19 Acetonitrile	41	4.766	4.766	(0.717)	41122	50.0000	48.1
20 Chloroprene	53	5.048	5.048	(0.759)	70527	5.00000	4.94
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	76360	5.00000	4.90
22 Acrylonitrile	53	5.159	5.154	(0.776)	13290	5.00000	4.98(M)

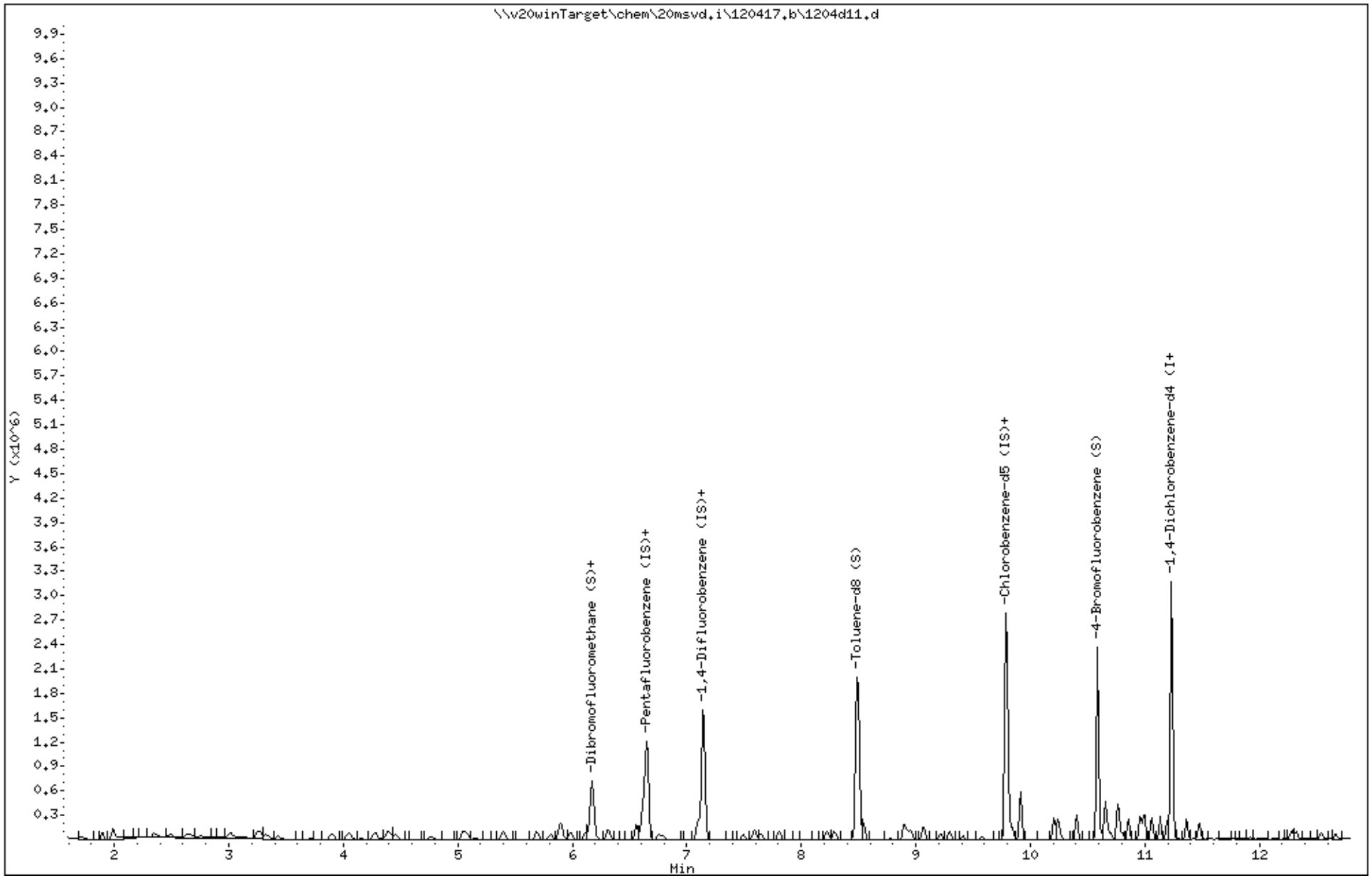
	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.396	5.396	(0.811)	160666	5.00000	4.53
	24 cis-1,2-Dichloroethene	96	5.688	5.688	(0.855)	36230	5.00000	4.74
	25 2,2-Dichloropropane	77	5.809	5.809	(0.873)	36754	5.00000	4.55
	26 Cyclohexane	84	5.899	5.899	(0.887)	42481	5.00000	4.65
	27 Bromochloromethane	128	5.904	5.899	(0.888)	19387	5.00000	5.34
	28 Chloroform	83	5.985	5.985	(0.900)	56768	5.00000	4.92
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	45240	5.00000	5.05
	30 Tetrahydrofuran	42	6.166	6.156	(0.927)	13521	5.00000	5.65(M)
	31 1,1,1-Trichloroethane	97	6.192	6.192	(0.931)	52586	5.00000	5.13
$	32 Dibromofluoromethane (S)	113	6.176	6.171	(0.929)	393872	50.0000	50.4
	33 1,1-Dichloropropene	75	6.318	6.312	(0.884)	46898	5.00000	5.09
	34 2-Butanone (MEK)	43	6.312	6.312	(0.949)	14523	5.00000	4.60
	35 Benzene	78	6.559	6.559	(0.918)	125370	5.00000	4.88
	36 Propionitrile	54	6.600	6.600	(0.992)	42885	50.0000	46.0
	37 Methacrylonitrile	41	6.615	6.620	(0.995)	209797	50.0000	47.9
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	354902	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	45460	5.00000	4.78
	40 Isobutanol	43	6.791	6.791	(1.021)	26462	105.000	102(M)
	41 Methylcyclohexane	83	7.098	7.093	(0.994)	49586	5.00000	5.00
	42 Trichloroethene	130	7.108	7.108	(0.995)	38634	5.00000	5.06
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1131759	50.0000	
	44 Dibromomethane	93	7.491	7.496	(1.049)	19293	5.00000	4.88
	45 1,2-Dichloropropane	63	7.587	7.592	(1.062)	43748	5.00000	5.45
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	40216	5.00000	4.90
	47 Methyl methacrylate	41	7.809	7.804	(1.093)	59558	10.0000	9.30
	48 1,4-Dioxane (p-Dioxane)	88	7.854	7.849	(1.099)	3603	100.000	96.5
	49 2-Chloroethyl vinyl ether	63	8.227	8.222	(1.152)	41323	10.0000	10.6
	50 cis-1,3-Dichloropropene	75	8.287	8.292	(1.160)	42698	5.00000	4.79
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1283526	50.0000	50.7
	52 Toluene	91	8.539	8.539	(1.195)	136212	5.00000	5.08
	53 Tetrachloroethene	164	8.897	8.902	(0.909)	35668	5.00000	5.15
	54 4-Methyl-2-Pentanone	43	8.907	8.902	(0.910)	30861	5.00000	4.76
	55 trans-1,3-Dichloropropene	75	8.927	8.932	(1.250)	37228	5.00000	4.78
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	26299	5.00000	4.95
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	23479	5.00000	4.74
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	26859	5.00000	4.91
	59 1,3-Dichloropropane	76	9.295	9.300	(0.950)	38742	5.00000	4.81
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	25665	5.00000	4.92
	61 2-Hexanone	43	9.577	9.577	(0.978)	20162	5.00000	4.54
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	522143	50.0000	
	63 Chlorobenzene	112	9.799	9.799	(1.001)	90086	5.00000	4.95
	64 Ethylbenzene	91	9.814	9.814	(1.003)	146244	5.00000	4.76
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	29149	5.00000	4.44
	66 m&p-Xylene	106	9.914	9.914	(1.013)	111541	10.0000	9.42
	67 o-Xylene	106	10.207	10.207	(1.043)	50262	5.00000	4.58
	68 Styrene	104	10.242	10.242	(1.046)	85616	5.00000	4.79
	69 Bromoform	173	10.262	10.267	(1.048)	17439	5.00000	4.49
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	133077	5.00000	4.89
$	71 4-Bromofluorobenzene (S)	176	10.584	10.589	(0.942)	532728	50.0000	52.5
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	10734	10.0000	7.76
	73 Bromobenzene	156	10.655	10.655	(0.948)	38139	5.00000	4.95
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	156681	5.00000	4.97
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	29589	5.00000	5.73
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	96144	5.00000	5.04

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	101252	5.00000	5.08
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	7399	5.00000	5.01
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	88273	5.00000	5.03
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	54183	5.00000	5.03
81 Pentachloroethane	167	10.982	10.982	(0.978)	19419	5.00000	4.29
82 1,2,4-Trimethylbenzene	105	10.998	10.998	(0.979)	97825	5.00000	4.99
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	124397	5.00000	4.95
84 p-Isopropyltoluene	119	11.134	11.134	(0.991)	99448	5.00000	4.91
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	59666	5.00000	4.86
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	513405	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.244	(1.000)	60572	5.00000	4.87
88 n-Butylbenzene	91	11.365	11.365	(1.012)	86179	5.00000	4.79
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	55272	5.00000	5.15
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	7014	5.00000	4.82
91 Hexachloro-1,3-butadiene	225	12.287	12.282	(1.094)	15016	5.00000	5.05
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	24411	5.00000	4.82
93 Naphthalene	128	12.544	12.544	(1.117)	44189	5.00000	4.76
94 1,2,3-Trichlorobenzene	180	12.670	12.670	(1.128)	18323	5.00000	4.72

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d11.d
Date : 04-DEC-2017 11:51
Client ID: CAL3
Instrument: 20msvd.i
Sample Info: CAL3,54929:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



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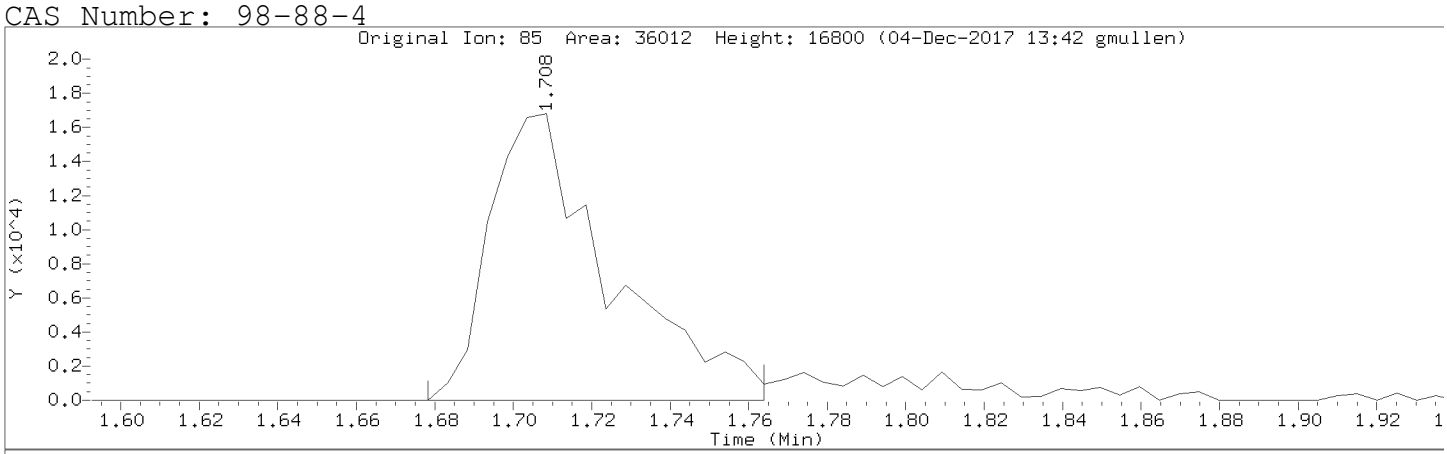
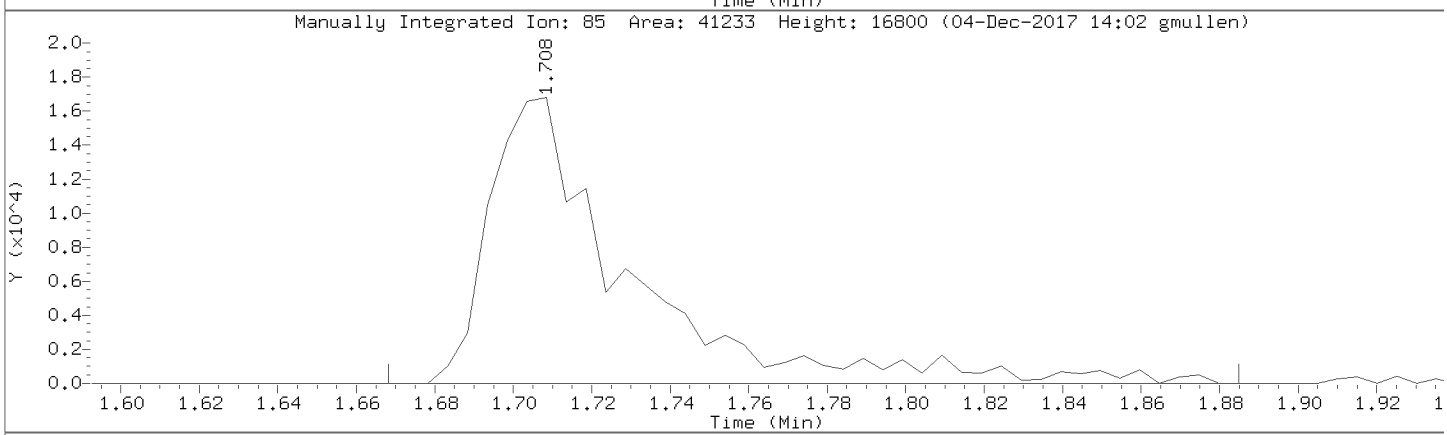
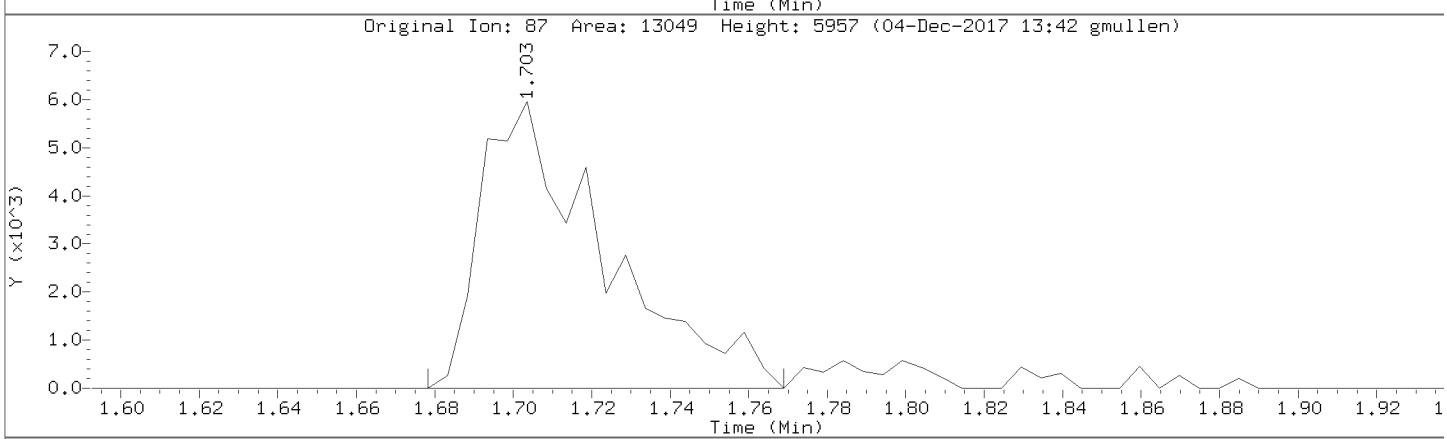
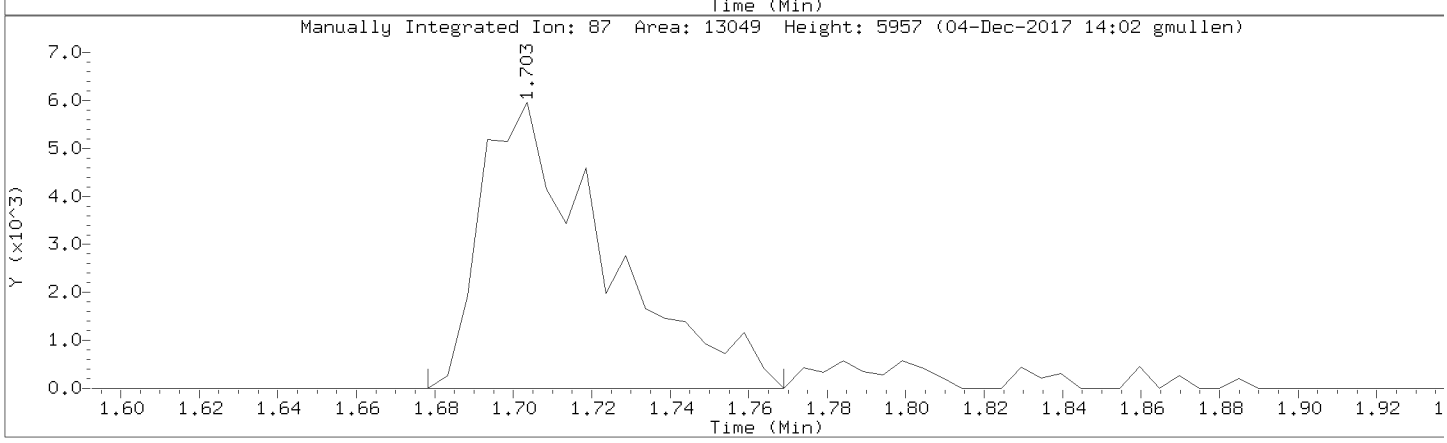
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: Dichlorodifluoromethane Review Code: LT
CAS Number: 98-88-4









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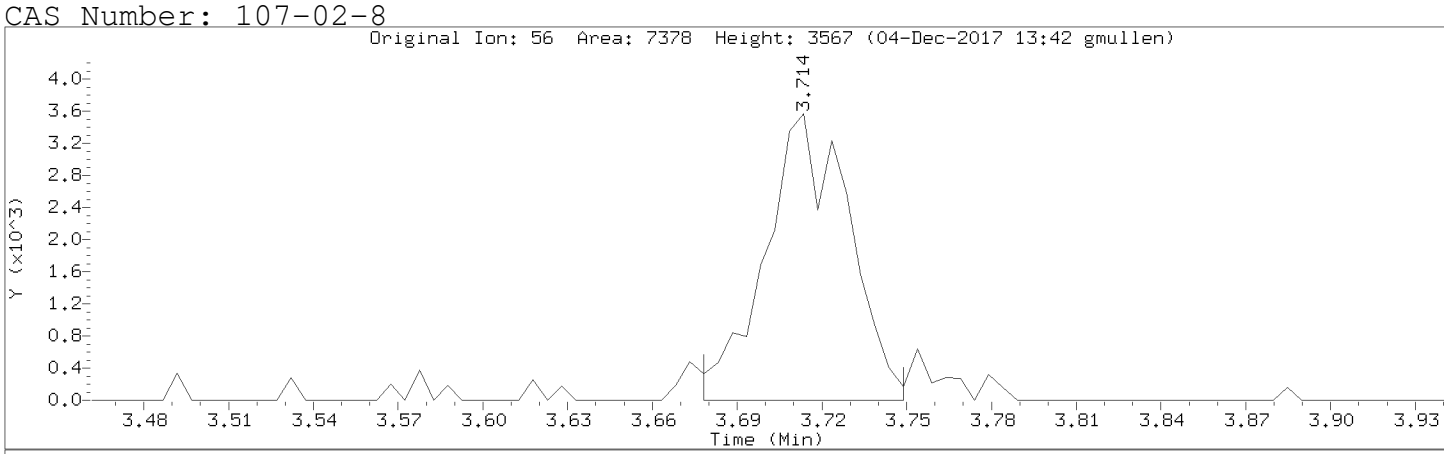
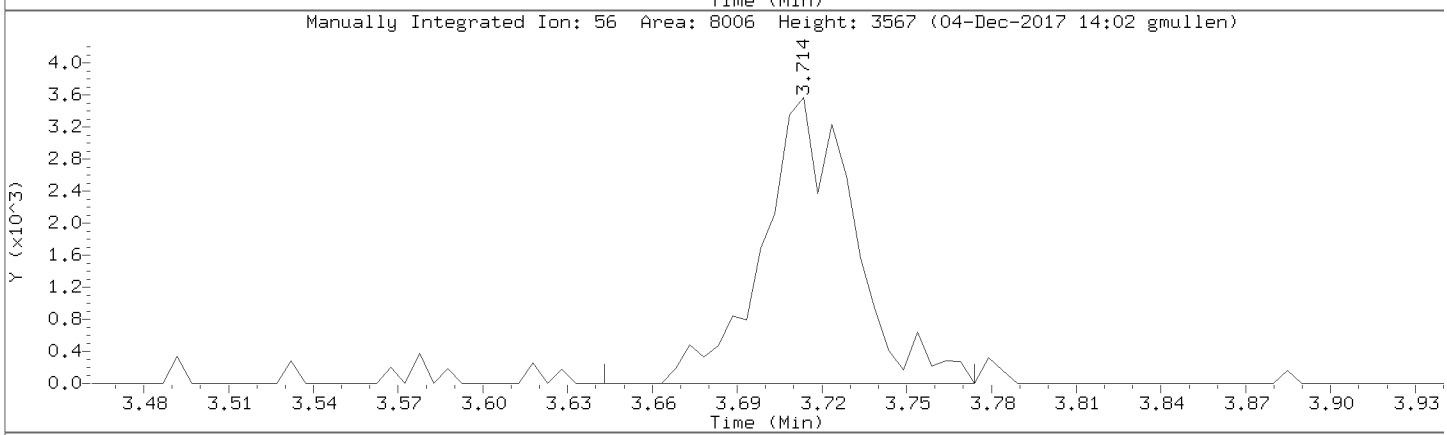
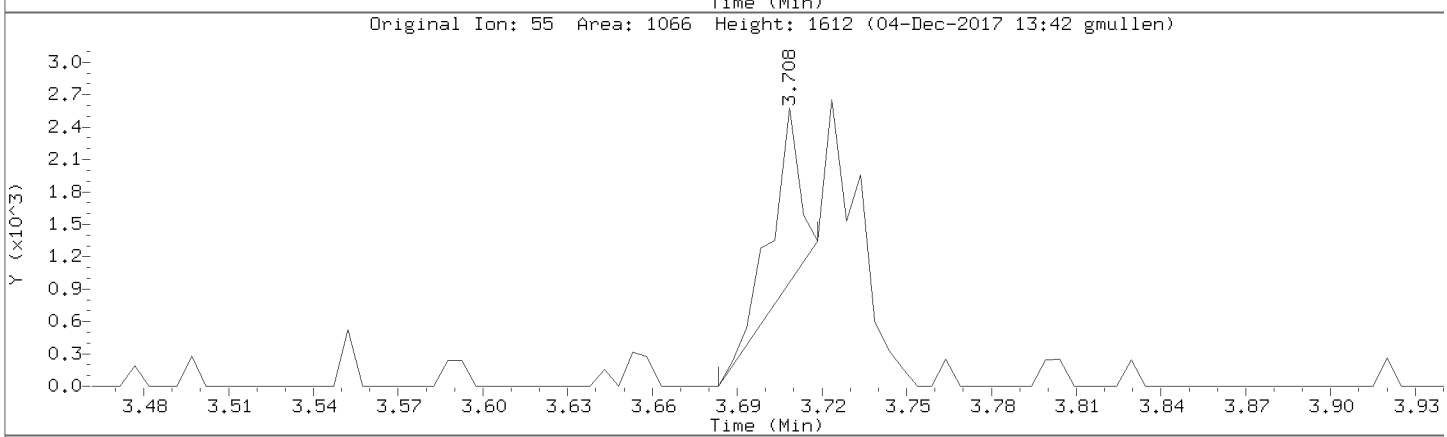
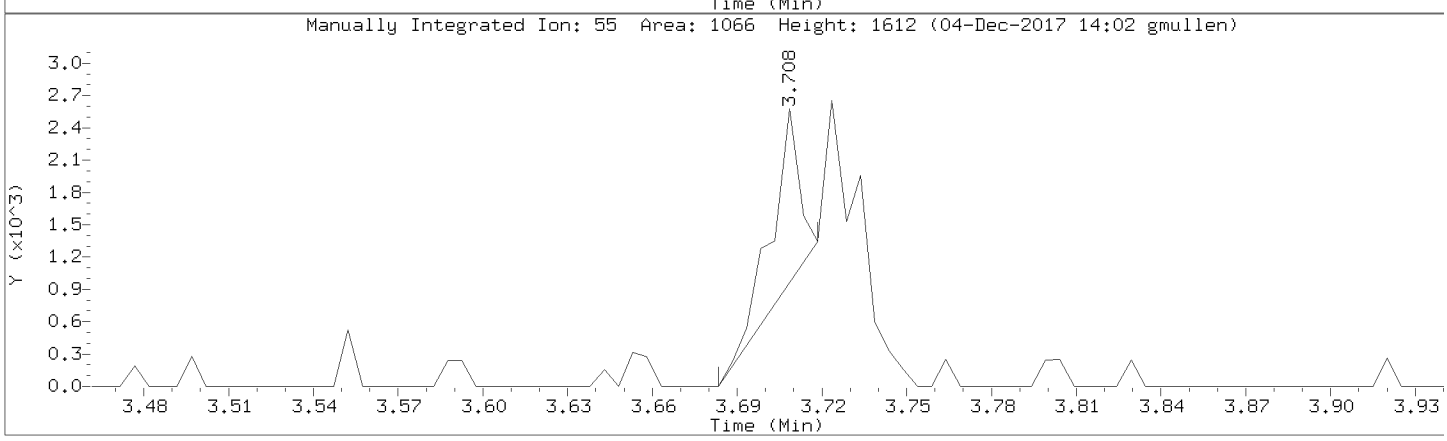
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: Acrolein Review Code: LT
CAS Number: 107-02-8









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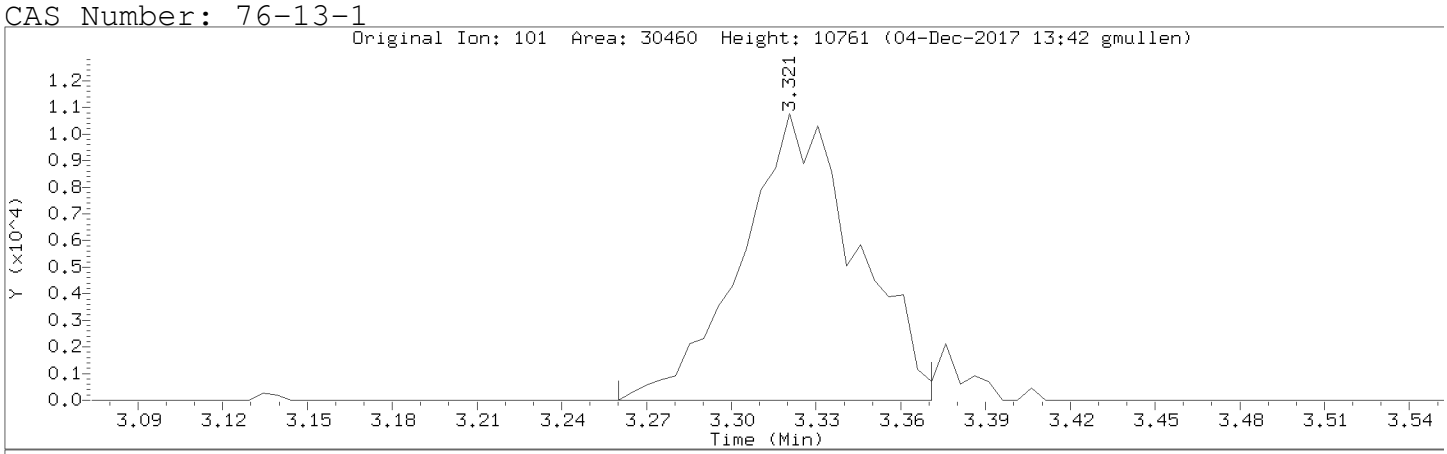
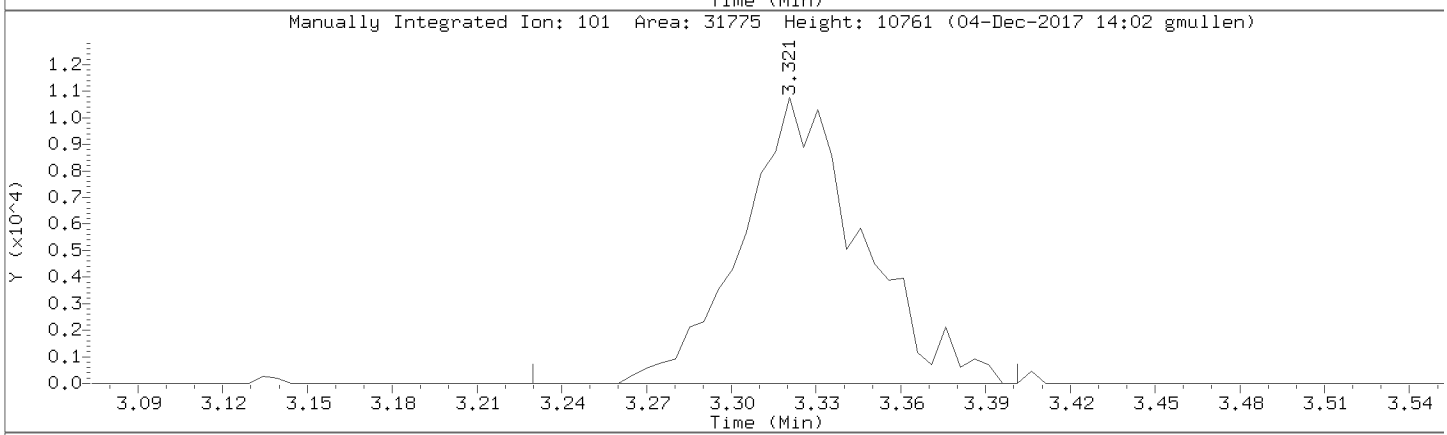
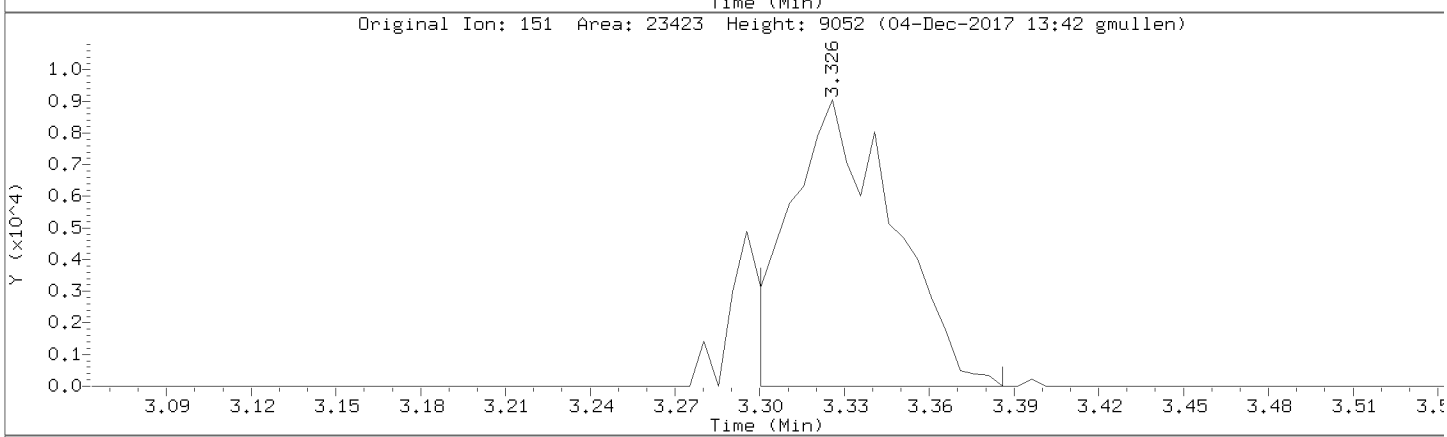
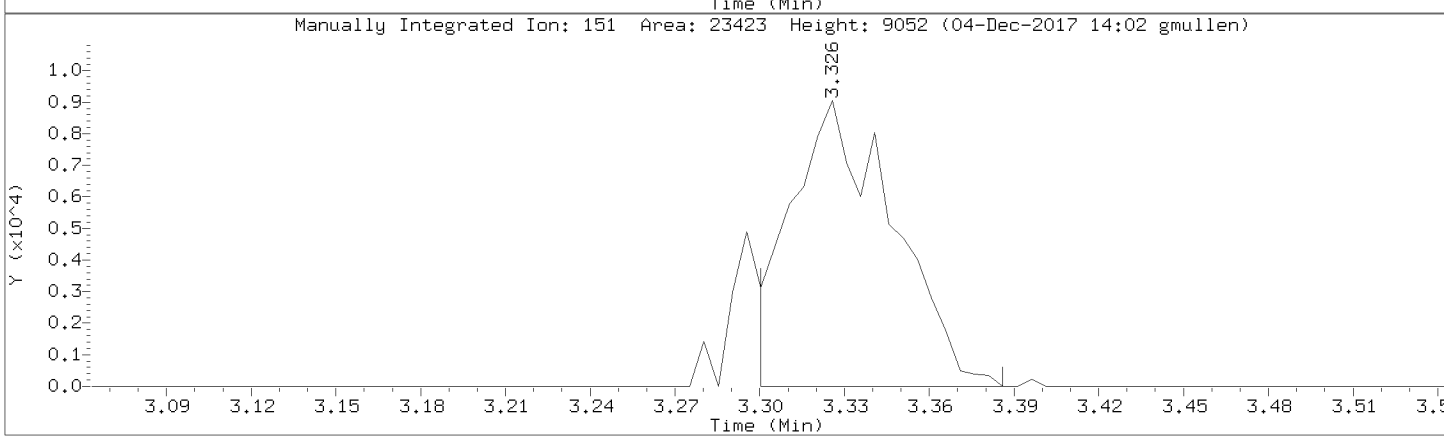
Injection Date: 04-DEC-2017 11:51
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: 1,1,2-Trichlorotrifluoroethane Review Code: LT
CAS Number: 76-13-1









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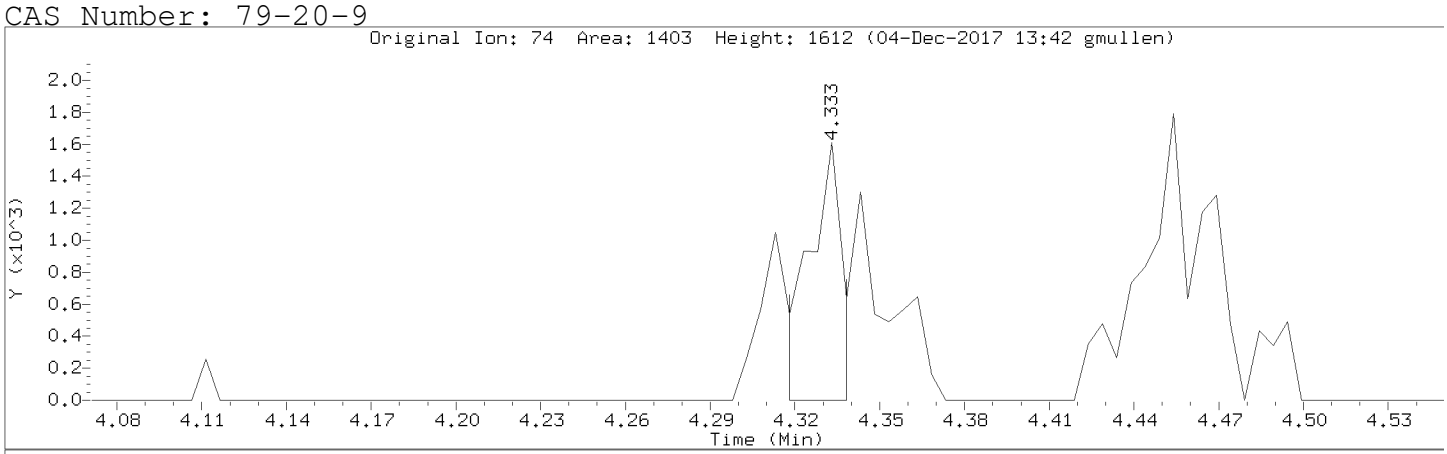
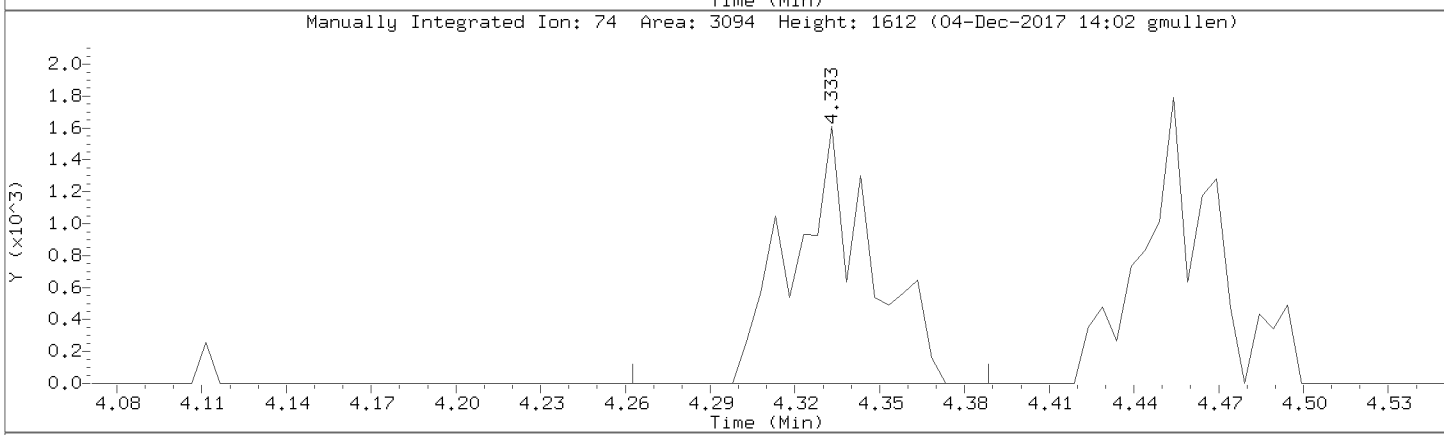
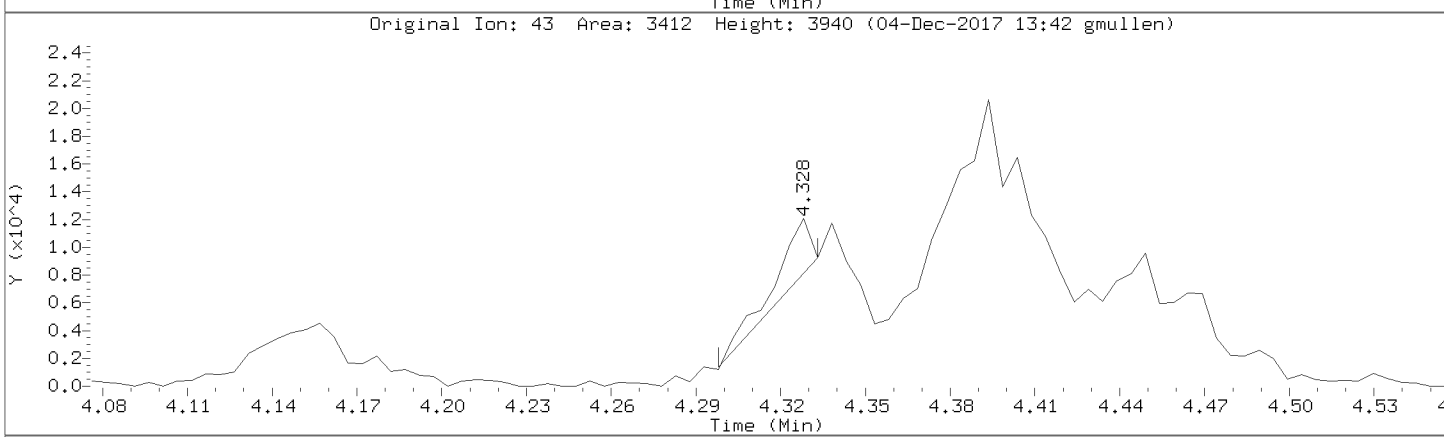
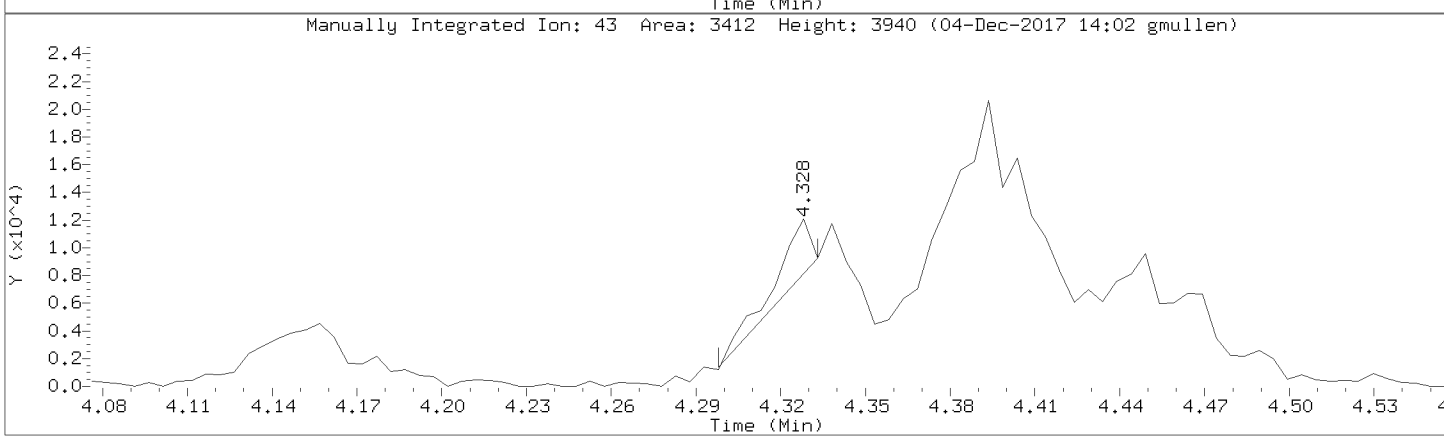
Injection Date: 04-DEC-2017 11:51
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: Methyl Acetate Review Code: LT
CAS Number: 79-20-9









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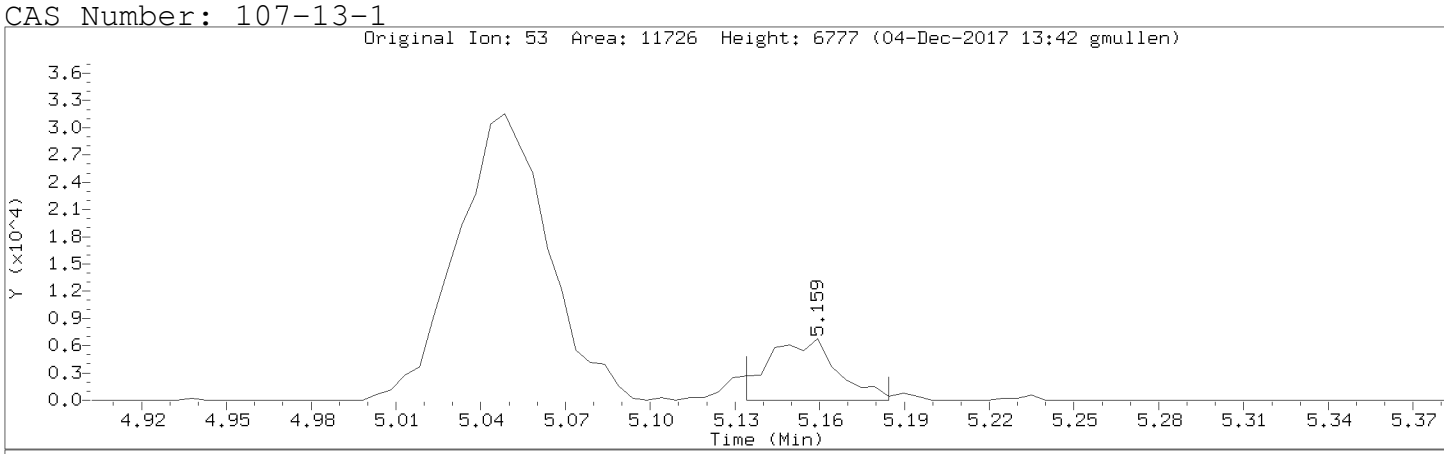
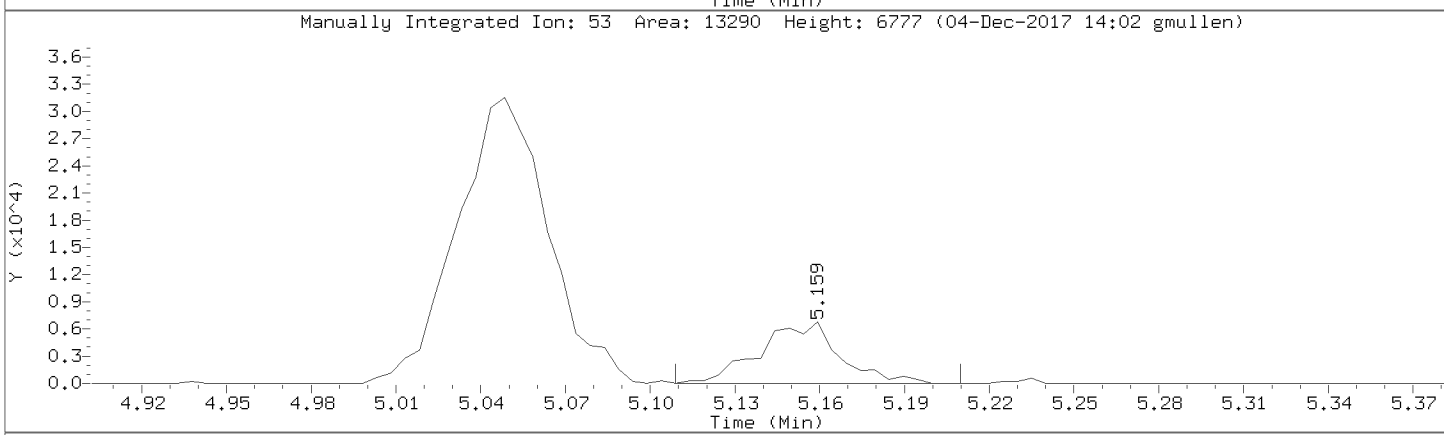
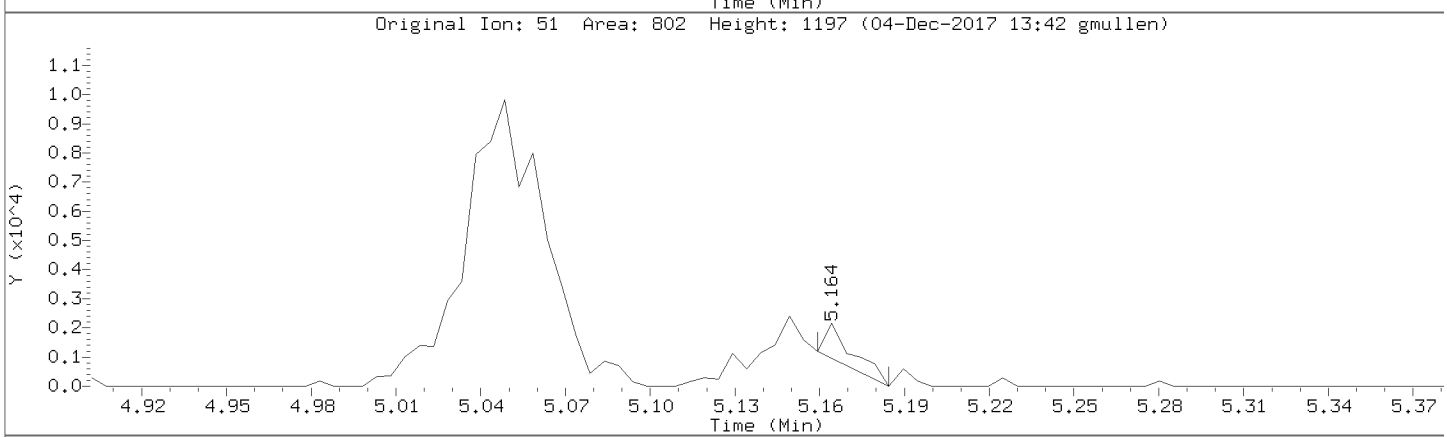
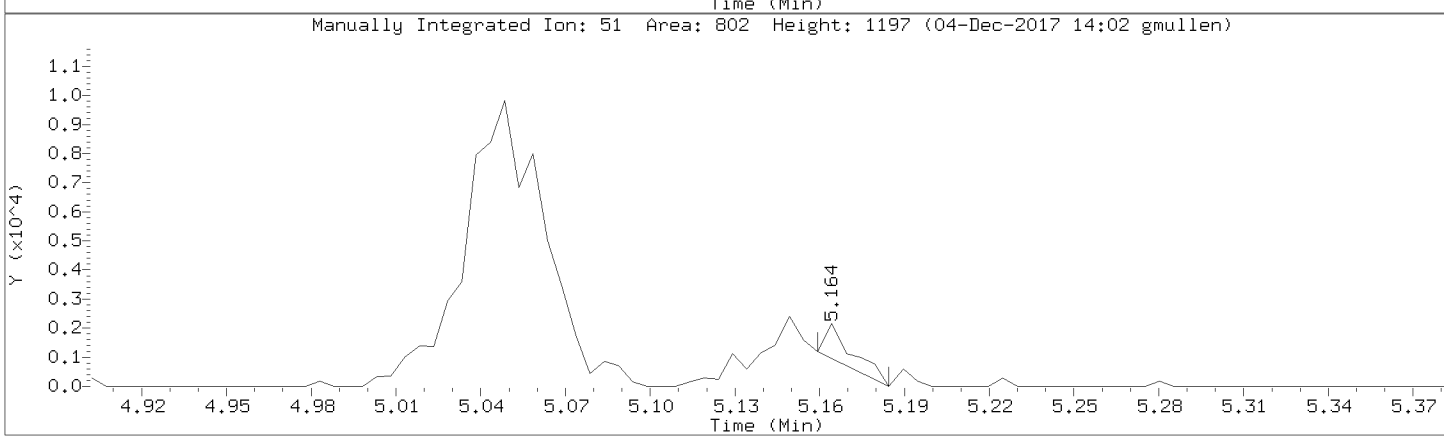
Lab Sample ID: CAL3

Compound: Acrylonitrile Review Code: LT
CAS Number: 107-13-1









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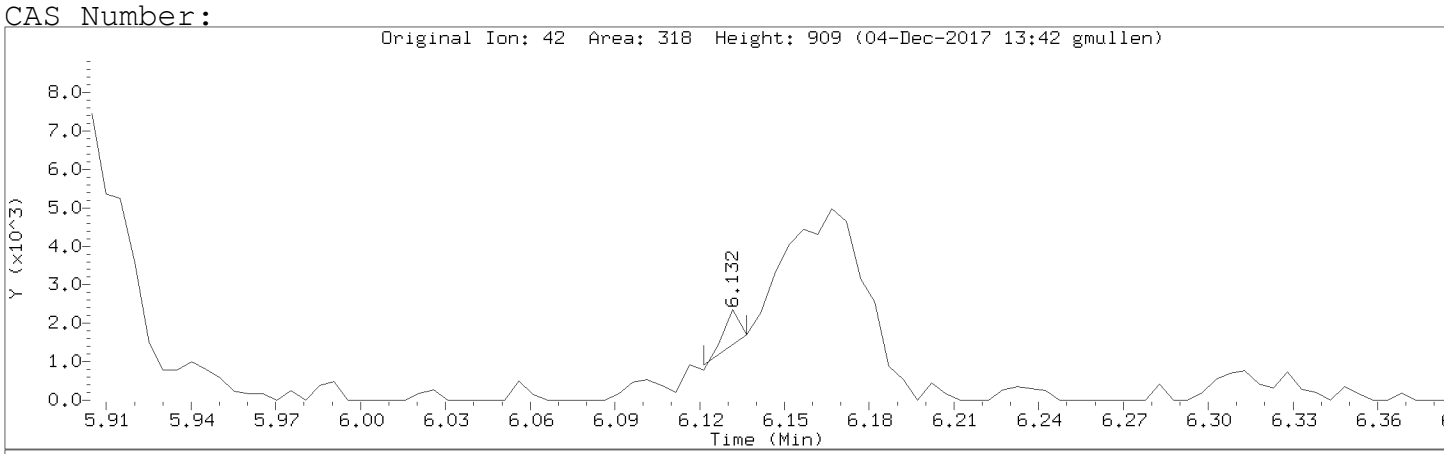
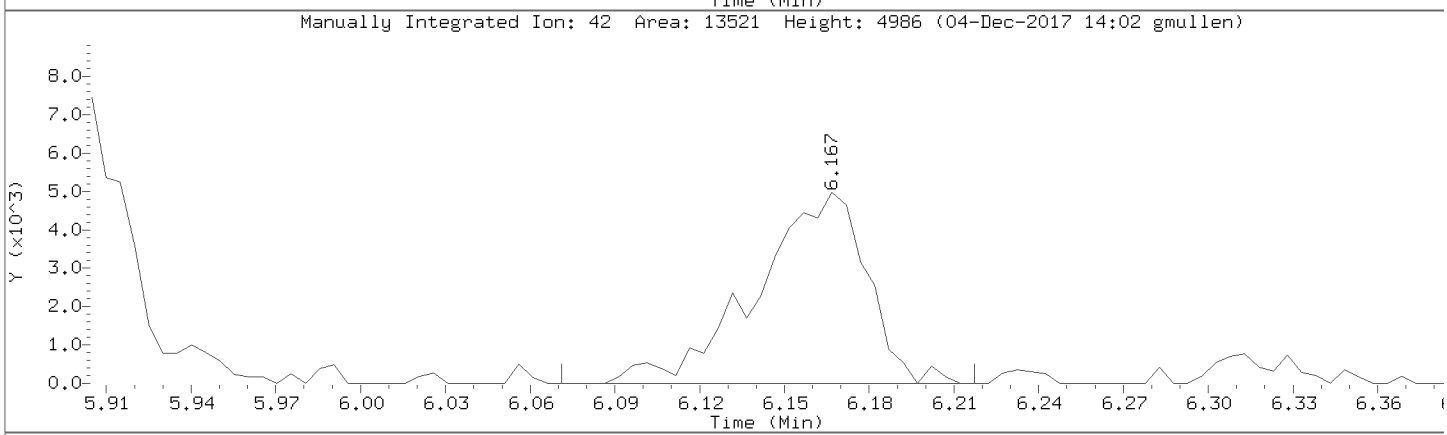
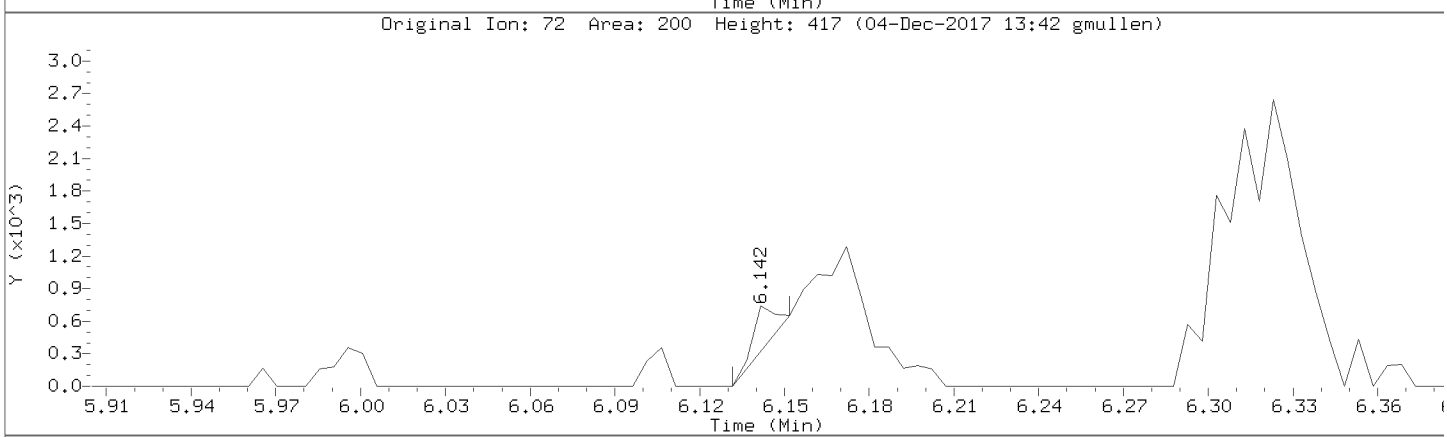
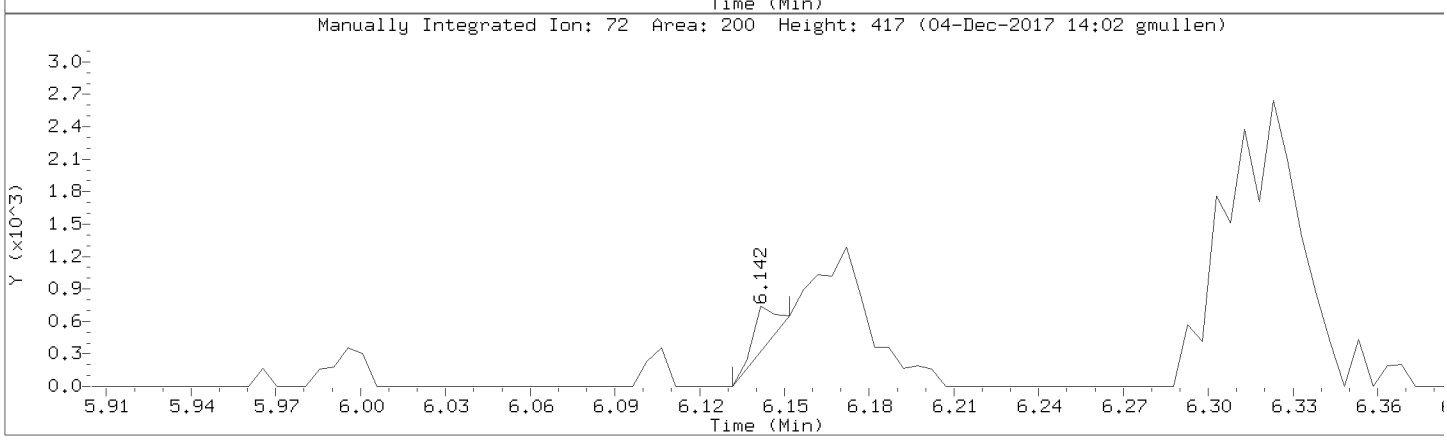
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: Tetrahydrofuran Review Code: LT
CAS Number:









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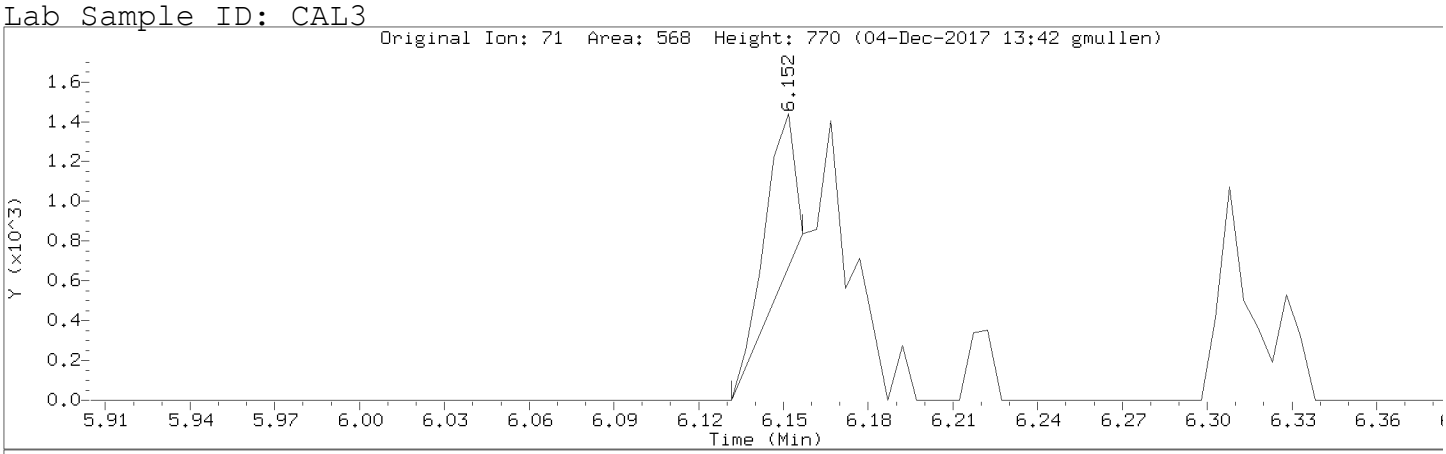

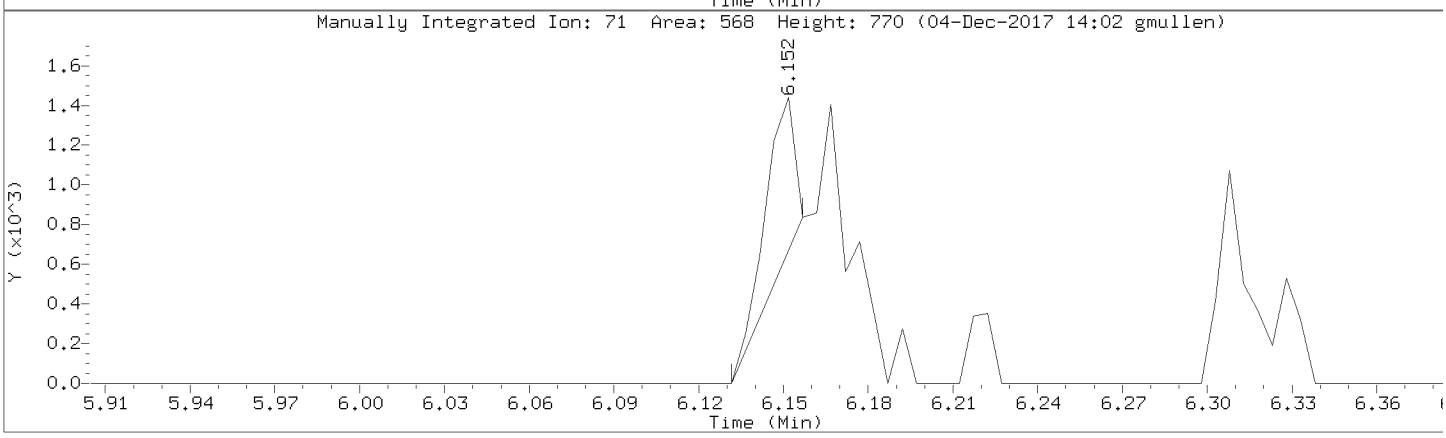

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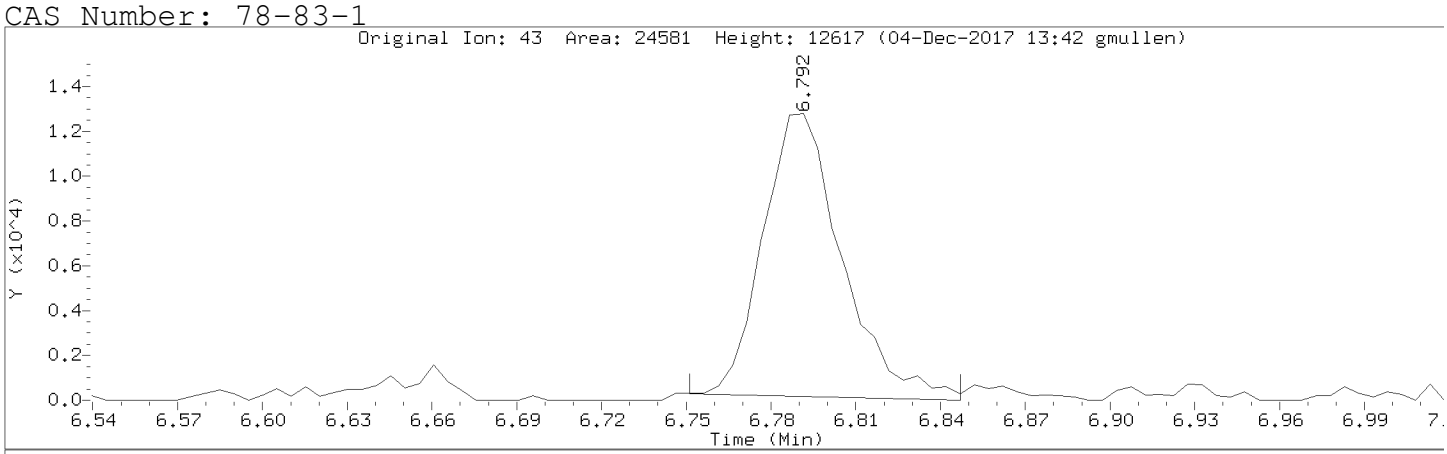
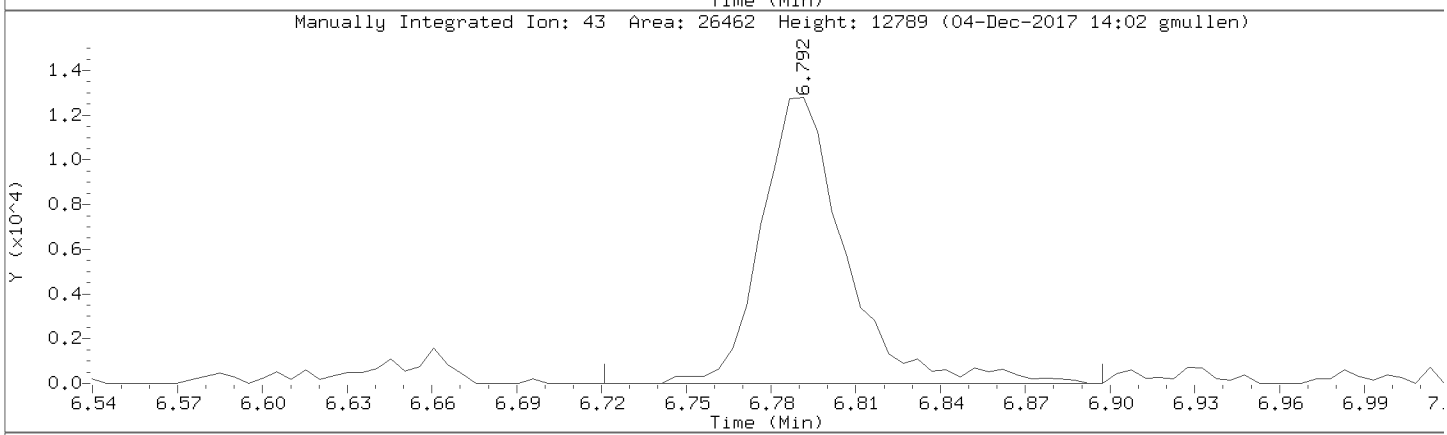
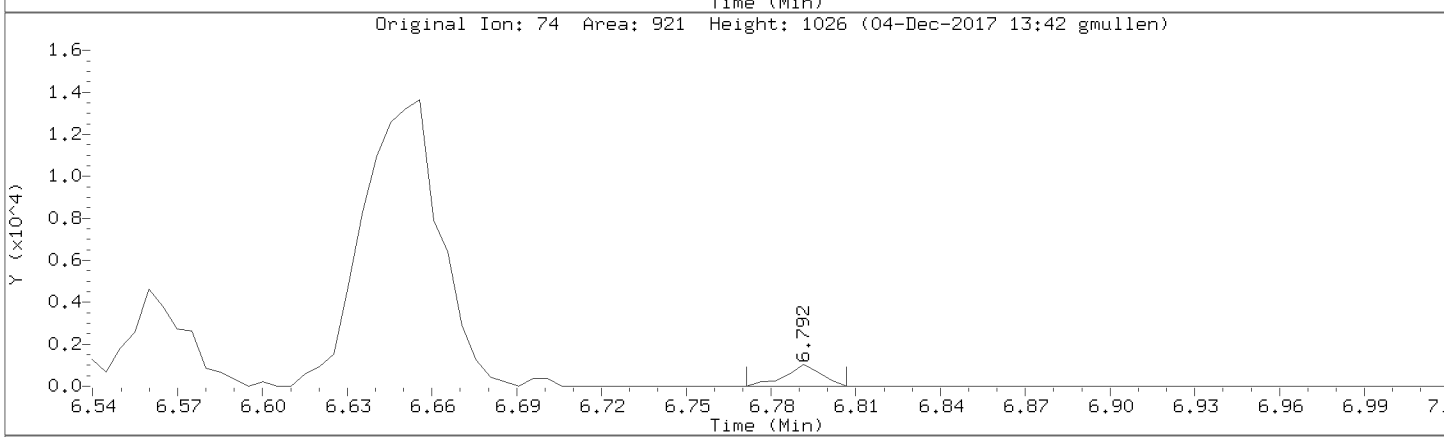
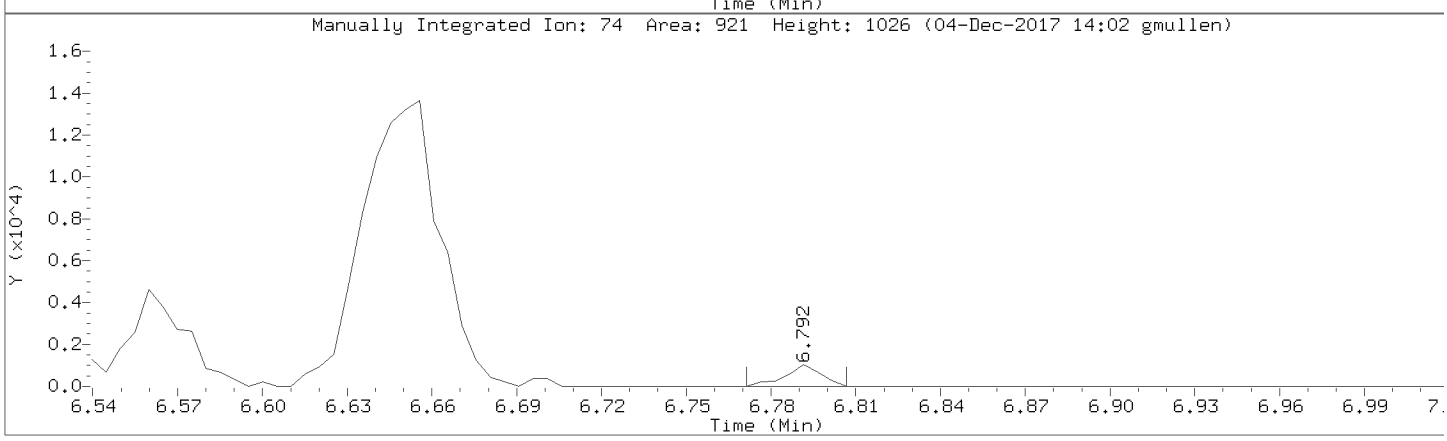
Injection Date: 04-DEC-2017 11:51
Instrument: 20msvd.i
Lab Sample ID: CAL3

Compound: Isobutanol Review Code: LT
CAS Number: 78-83-1









Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d12.d
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Inj Date : 04-DEC-2017 12:09
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal4,54930:1
Misc Info : 7846
Comment : SW846 8260
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Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 12:09 Cal File: 1204d12.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.698	1.703	(0.255)	155613	20.0000	19.6(M)
2 Chloromethane	50	1.894	1.894	(0.285)	266173	20.0000	20.0
3 Vinyl chloride	62	1.990	1.990	(0.299)	255008	20.0000	20.2
4 Bromomethane	94	2.338	2.338	(0.352)	99641	20.0000	17.6
5 Chloroethane	64	2.494	2.484	(0.375)	111706	20.0000	20.0(H)
6 Trichlorofluoromethane	101	2.645	2.640	(0.398)	201345	20.0000	19.8
7 1,1-Dichloroethene	96	3.249	3.250	(0.489)	130604	20.0000	22.9
8 Carbon disulfide	76	3.275	3.275	(0.492)	407248	20.0000	21.0
9 1,1,2-Trichlorotrifluoroethane	101	3.320	3.325	(0.499)	146427	20.0000	22.0
10 Iodomethane	142	3.426	3.431	(0.515)	269145	20.0000	21.4
11 Acrolein	56	3.708	3.713	(0.558)	24514	20.0000	19.8
12 Allyl chloride	41	3.899	3.894	(0.586)	282129	20.0000	20.7
13 Methylene Chloride	84	4.050	4.046	(0.609)	137024	20.0000	21.1
14 Acetone	43	4.146	4.151	(0.624)	34176	20.0000	20.1
15 trans-1,2-Dichloroethene	96	4.282	4.277	(0.644)	136429	20.0000	21.2
16 Methyl Acetate	74	4.333	4.323	(0.652)	14596	20.0000	20.4(M)
17 n-Hexane	57	4.393	4.393	(0.661)	291869	20.0000	21.4
18 Methyl-tert-butyl ether	73	4.448	4.449	(0.669)	260460	20.0000	20.8
19 Acetonitrile	41	4.761	4.766	(0.716)	172496	200.000	210
20 Chloroprene	53	5.048	5.048	(0.759)	287885	20.0000	21.0
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	323956	20.0000	21.6
22 Acrylonitrile	53	5.149	5.154	(0.774)	51448	20.0000	20.0

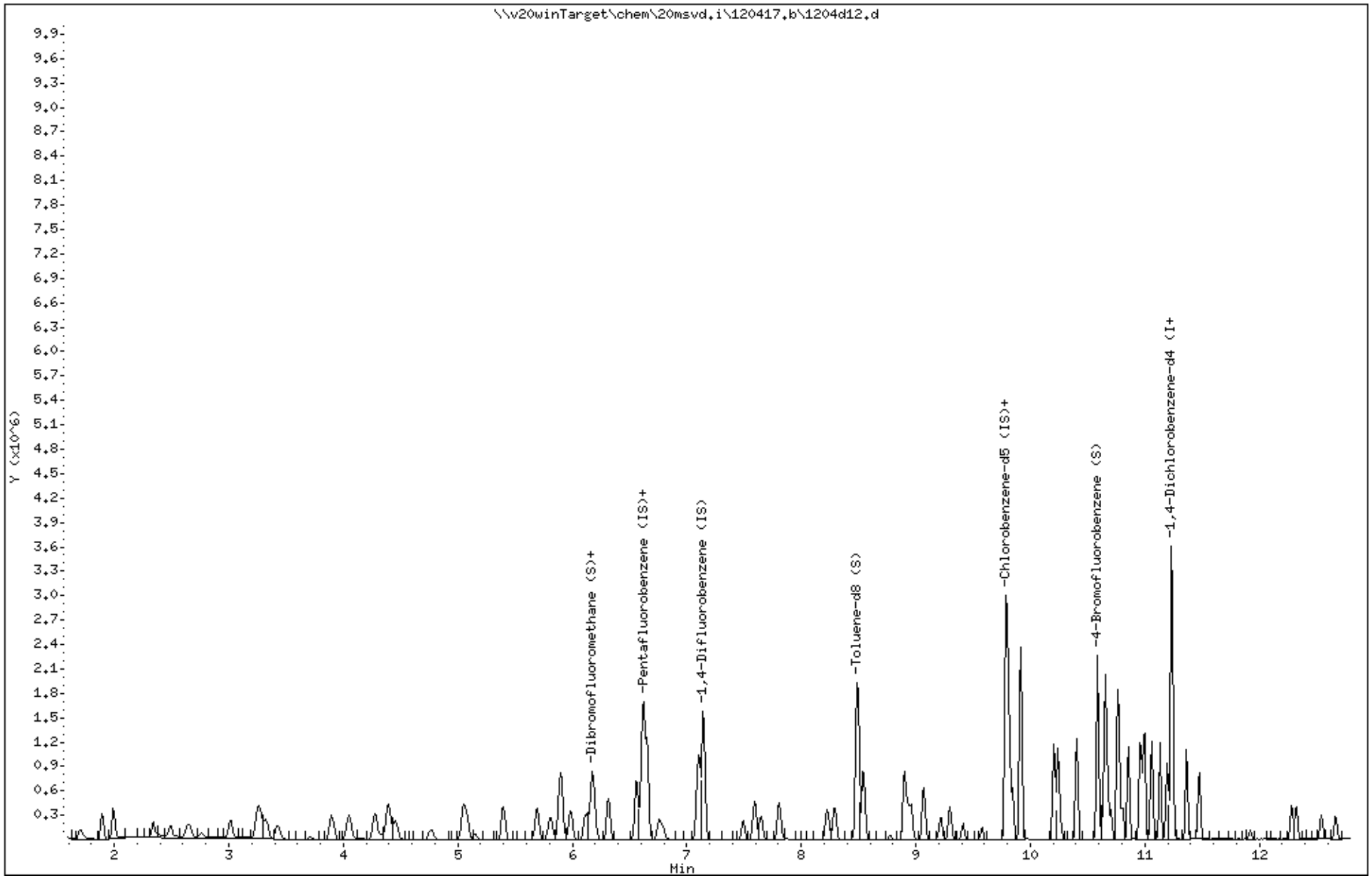
	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.396	5.396	(0.811)	682988	20.0000	20.0
	24 cis-1,2-Dichloroethene	96	5.693	5.688	(0.856)	154774	20.0000	21.1
	25 2,2-Dichloropropane	77	5.814	5.809	(0.874)	167251	20.0000	21.5
	26 Cyclohexane	84	5.899	5.899	(0.887)	194560	20.0000	22.1
	27 Bromochloromethane	128	5.904	5.899	(0.888)	71407	20.0000	20.4
	28 Chloroform	83	5.985	5.985	(0.900)	244547	20.0000	22.0
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	184513	20.0000	21.0
	30 Tetrahydrofuran	42	6.156	6.156	(0.926)	50825	20.0000	20.7
	31 1,1,1-Trichloroethane	97	6.191	6.192	(0.931)	212811	20.0000	21.6
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	374543	50.0000	49.8
	33 1,1-Dichloropropene	75	6.317	6.312	(0.884)	187656	20.0000	20.8
	34 2-Butanone (MEK)	43	6.317	6.312	(0.950)	59419	20.0000	19.6
	35 Benzene	78	6.559	6.559	(0.918)	532447	20.0000	21.2
	36 Propionitrile	54	6.600	6.600	(0.992)	179509	200.000	200
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	870464	200.000	206
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	341537	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	189303	20.0000	20.3
	40 Isobutanol	43	6.791	6.791	(1.021)	100940	420.000	404
	41 Methylcyclohexane	83	7.098	7.093	(0.994)	202886	20.0000	21.2(M)
	42 Trichloroethene	130	7.108	7.108	(0.995)	164258	20.0000	21.5
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1109144	50.0000	
	44 Dibromomethane	93	7.496	7.496	(1.049)	78740	20.0000	20.1
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	176082	20.0000	20.6
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	163321	20.0000	20.3
	47 Methyl methacrylate	41	7.804	7.804	(1.092)	258519	40.0000	41.2
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.849	(1.099)	15949	400.000	415(M)
	49 2-Chloroethyl vinyl ether	63	8.227	8.222	(1.152)	168686	40.0000	44.1
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	202981	20.0000	23.2
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1227727	50.0000	49.5
	52 Toluene	91	8.544	8.539	(1.196)	574669	20.0000	21.8
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	146142	20.0000	22.0
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	127095	20.0000	20.5
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	160403	20.0000	21.0
	56 Ethyl methacrylate	69	9.068	9.063	(1.269)	103841	20.0000	19.9
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	98595	20.0000	20.3
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	116223	20.0000	22.2
	59 1,3-Dichloropropane	76	9.295	9.300	(0.950)	158878	20.0000	20.6
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	106714	20.0000	20.9
	61 2-Hexanone	43	9.577	9.577	(0.978)	88107	20.0000	20.7
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	499566	50.0000	
	63 Chlorobenzene	112	9.798	9.799	(1.001)	381899	20.0000	21.9
	64 Ethylbenzene	91	9.814	9.814	(1.003)	634570	20.0000	21.6
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	134100	20.0000	21.3
	66 m&p-Xylene	106	9.914	9.914	(1.013)	475248	40.0000	42.0
	67 o-Xylene	106	10.207	10.207	(1.043)	216284	20.0000	20.6
	68 Styrene	104	10.242	10.242	(1.046)	354684	20.0000	20.8
	69 Bromoform	173	10.262	10.267	(1.048)	79502	20.0000	21.4
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	577402	20.0000	20.6
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	503492	50.0000	48.3
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	53787	40.0000	37.8
	73 Bromobenzene	156	10.655	10.655	(0.948)	161740	20.0000	20.4
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	679463	20.0000	21.0
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	114255	20.0000	21.5
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	406157	20.0000	20.7

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	422791	20.0000	20.7
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	30618	20.0000	20.2
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	372399	20.0000	20.6
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	239062	20.0000	21.6
81 Pentachloroethane	167	10.982	10.982	(0.978)	90561	20.0000	19.5
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	423058	20.0000	21.0
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	544218	20.0000	21.1
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	438626	20.0000	21.1
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	264824	20.0000	21.0
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	527388	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.244	(1.000)	268916	20.0000	21.0
88 n-Butylbenzene	91	11.365	11.365	(1.012)	387190	20.0000	20.9
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	230621	20.0000	20.9
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	31376	20.0000	21.0
91 Hexachloro-1,3-butadiene	225	12.287	12.282	(1.094)	66095	20.0000	21.6
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	106294	20.0000	20.4
93 Naphthalene	128	12.539	12.544	(1.116)	184767	20.0000	19.4
94 1,2,3-Trichlorobenzene	180	12.665	12.670	(1.127)	78981	20.0000	19.8

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d12.d
Date : 04-DEC-2017 12:09
Client ID: CAL4
Instrument: 20msvd.i
Sample Info: CAL4,54930:1
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



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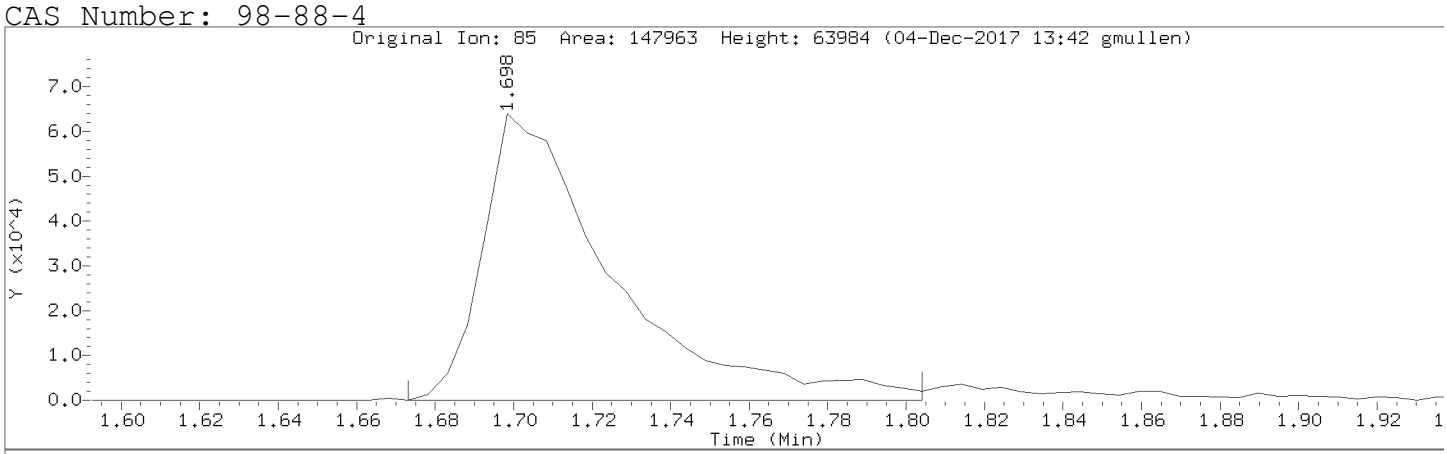
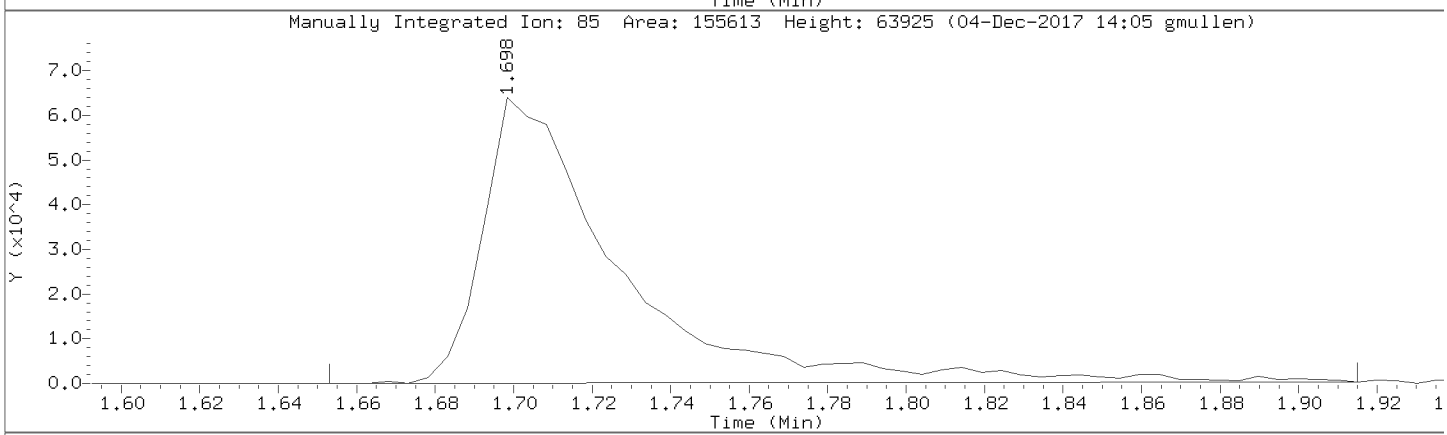
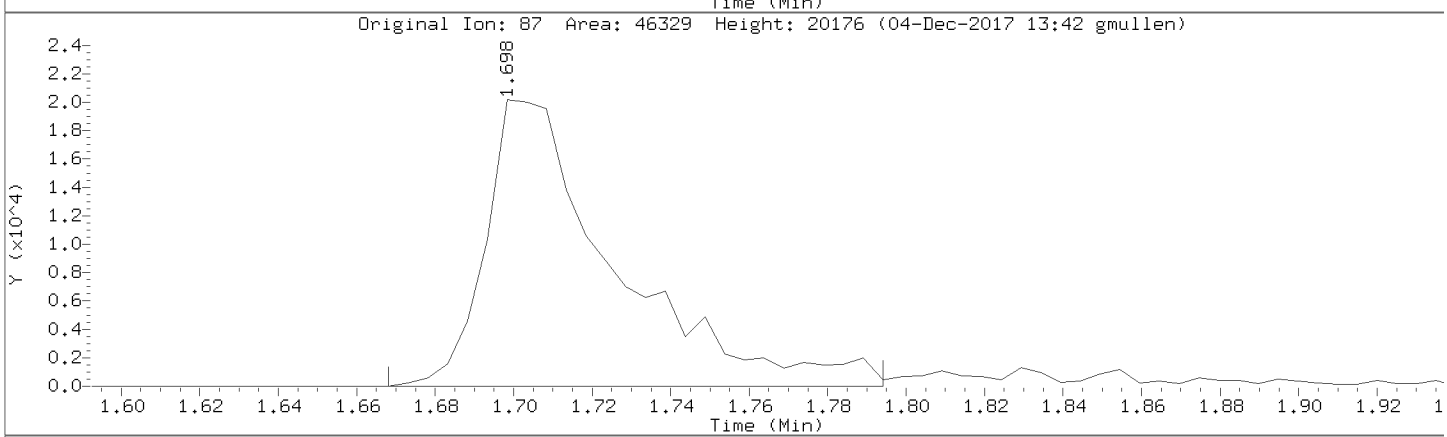
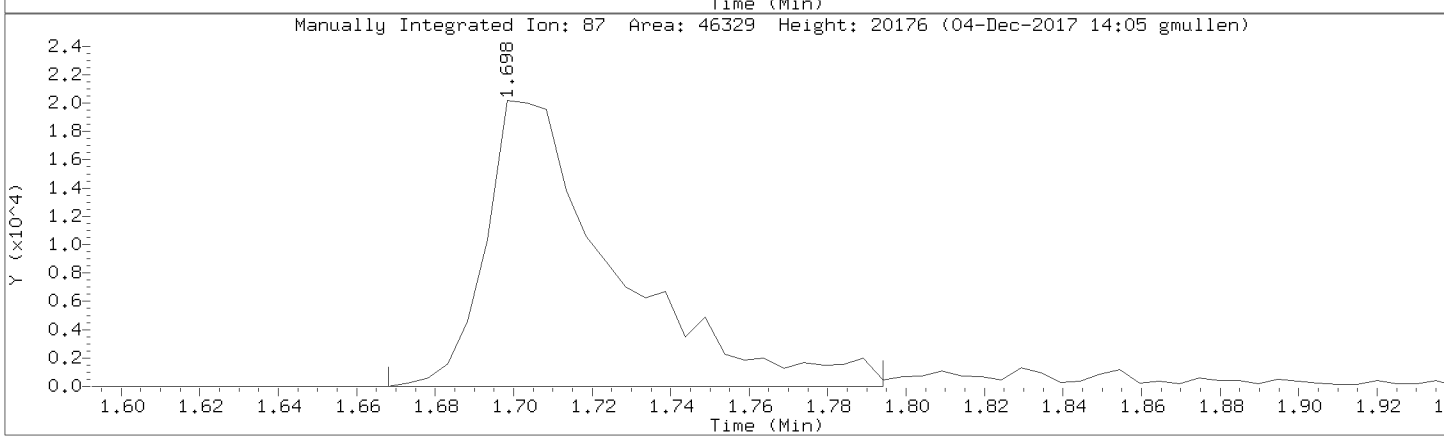
Injection Date: 04-DEC-2017 12:09
Instrument: 20msvd.i
Lab Sample ID: CAL4

Compound: Dichlorodifluoromethane Review Code: LT
CAS Number: 98-88-4









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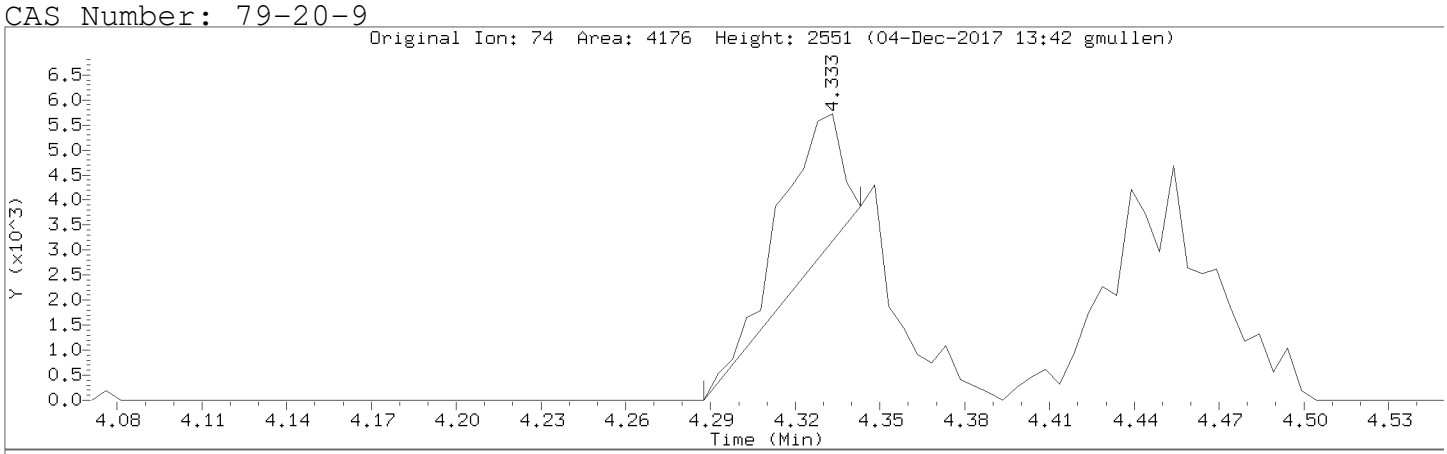
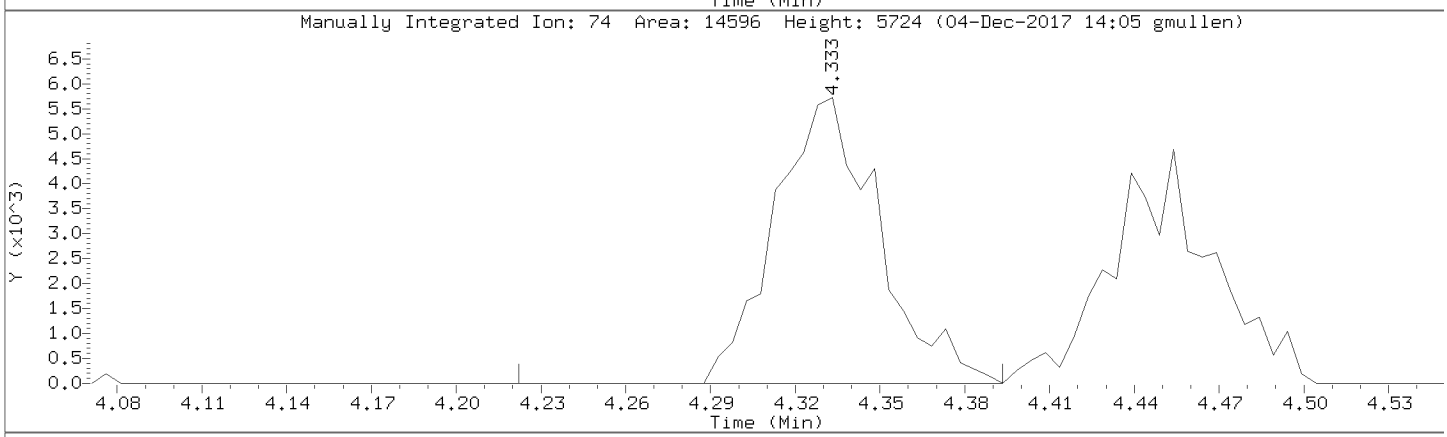
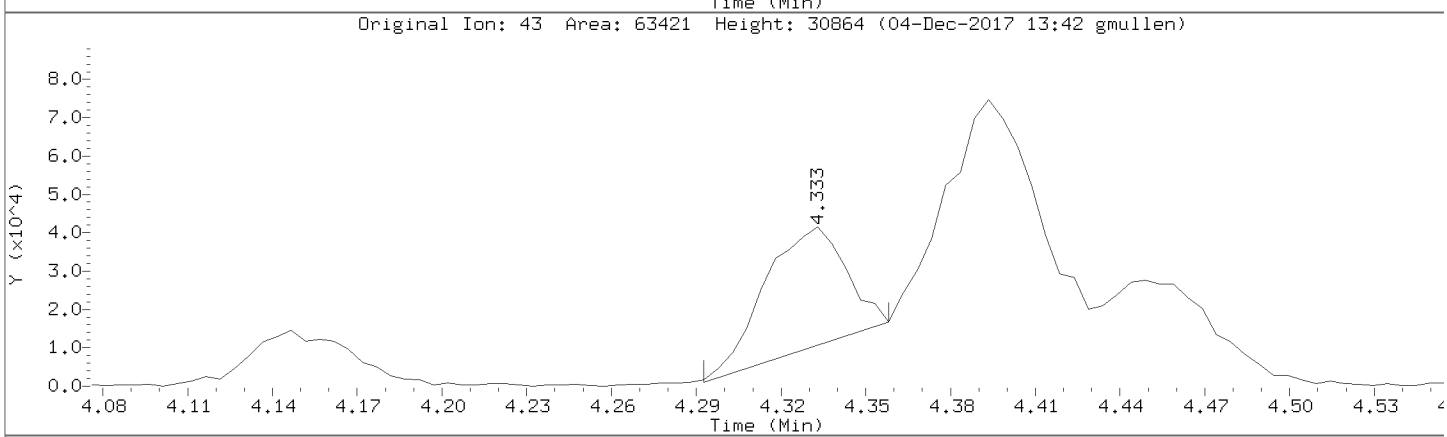
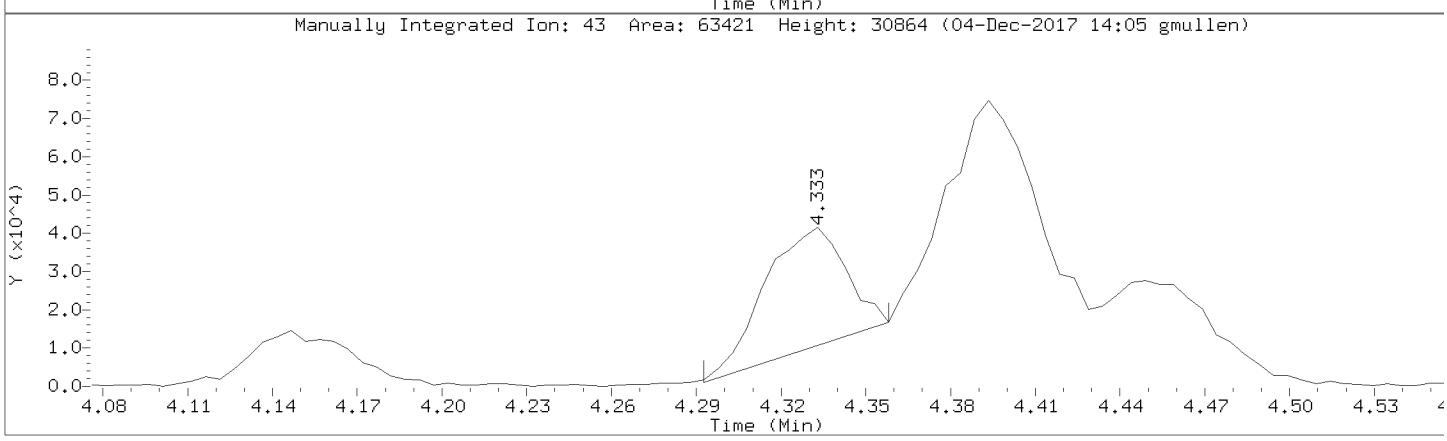
Injection Date: 04-DEC-2017 12:09
Instrument: 20msvd.i
Lab Sample ID: CAL4

Compound: Methyl Acetate Review Code: LT
CAS Number: 79-20-9









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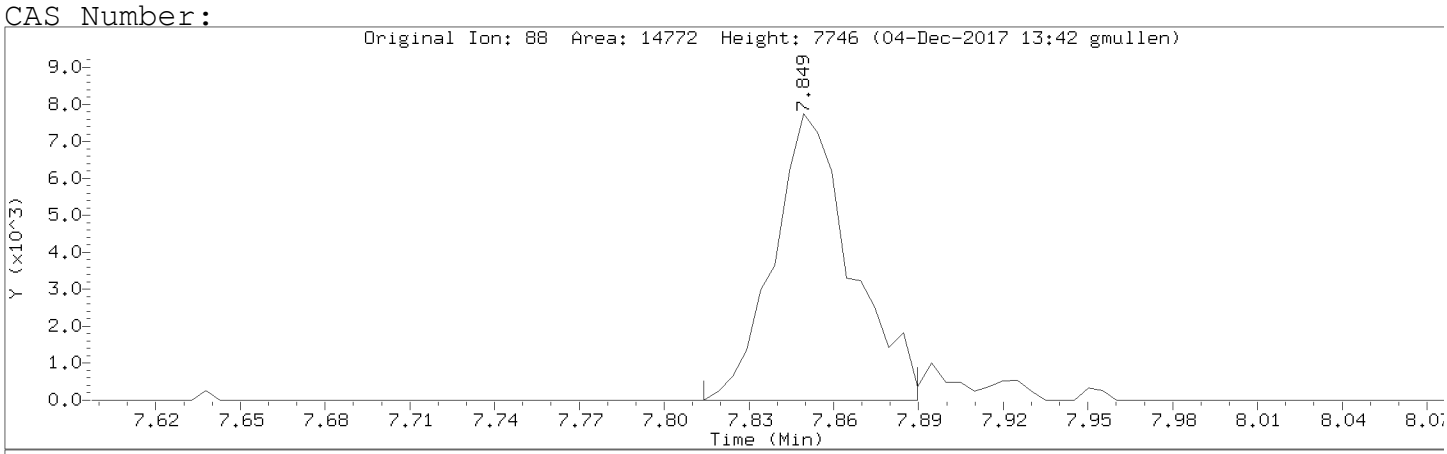
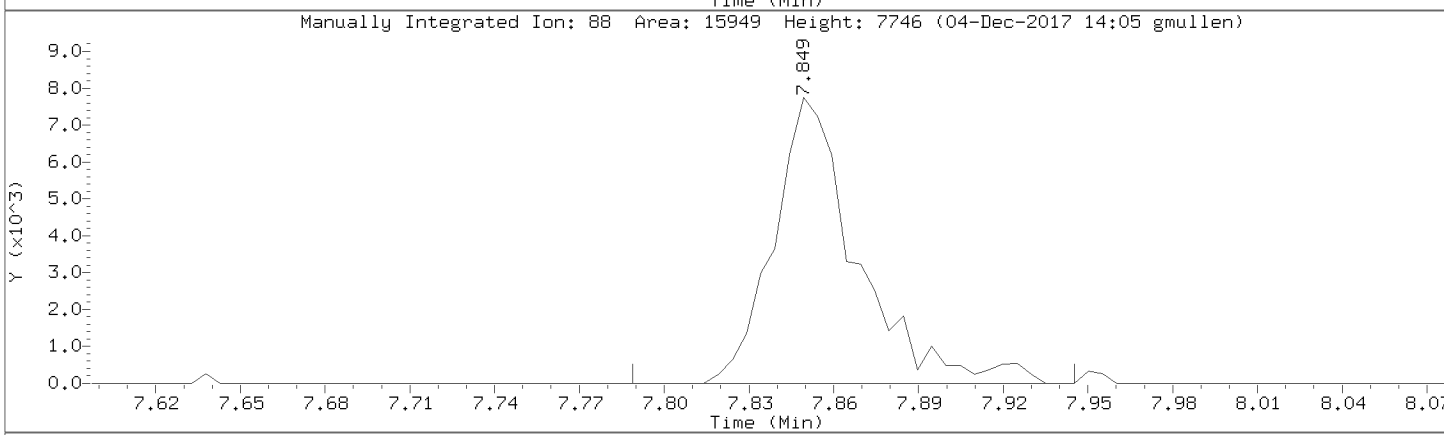
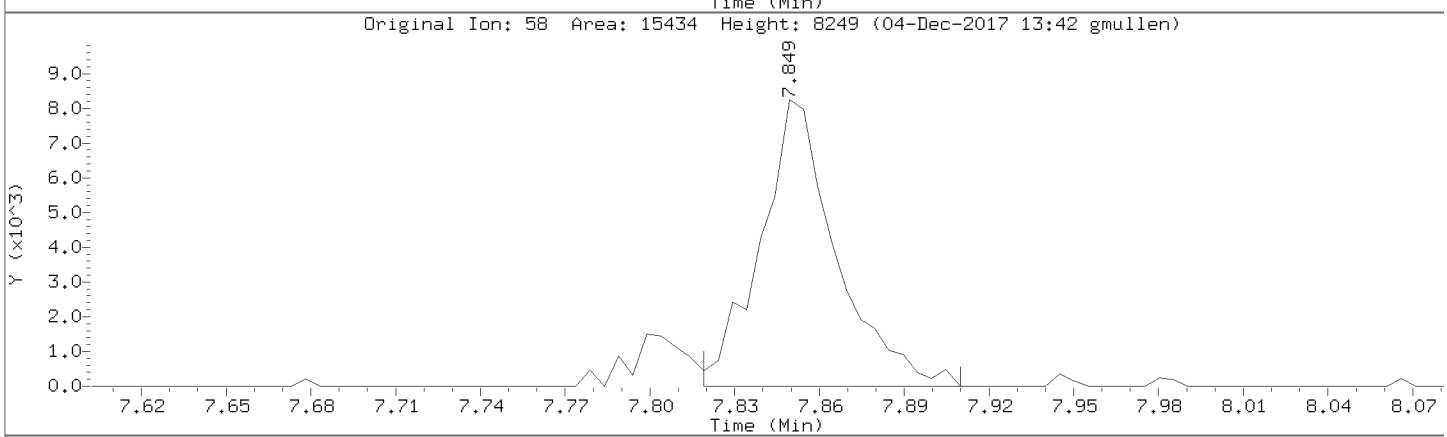
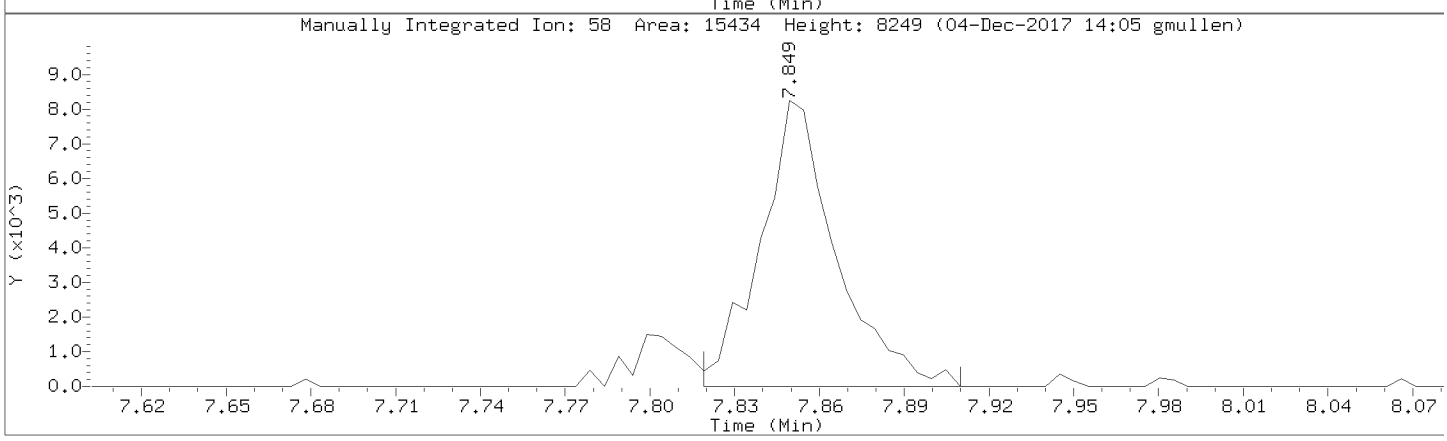
Instrument: 20msvd.i
Lab Sample ID: CAL4

Compound: 1,4-Dioxane (p-Dioxane) Review Code: LT
CAS Number:









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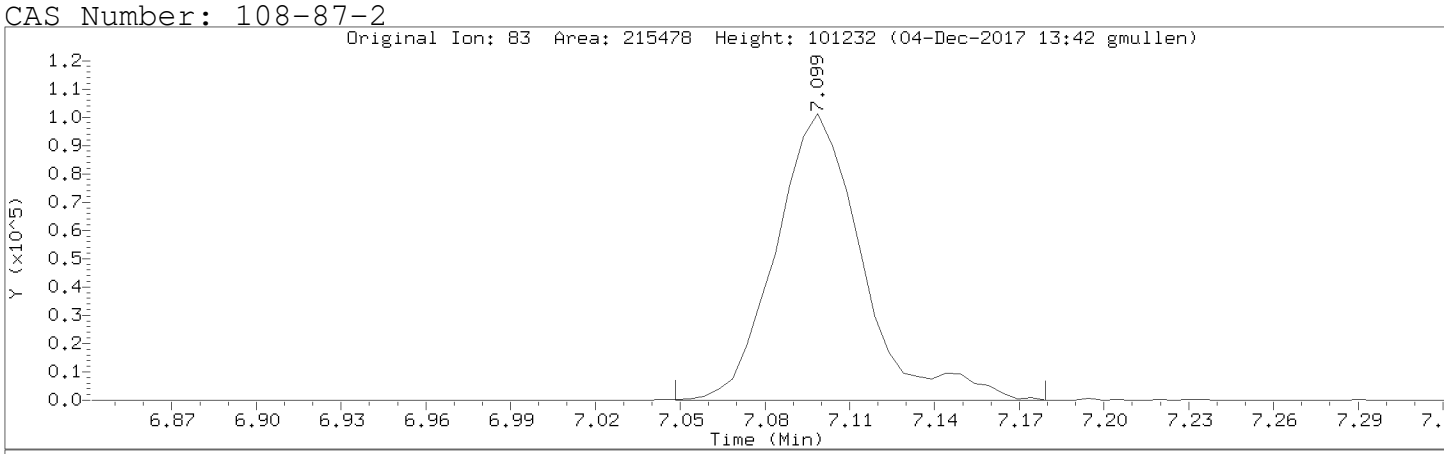
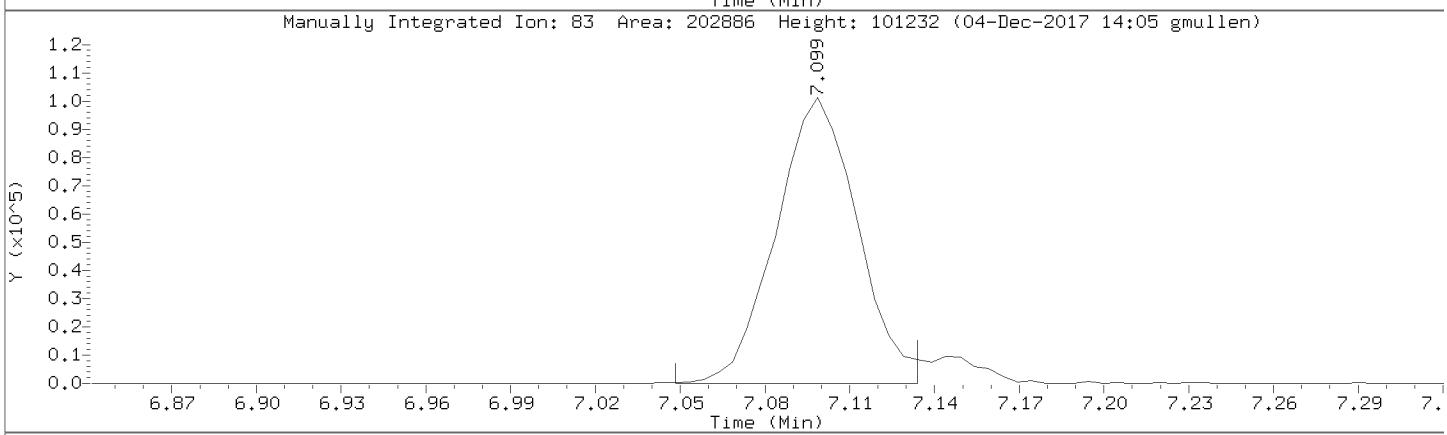
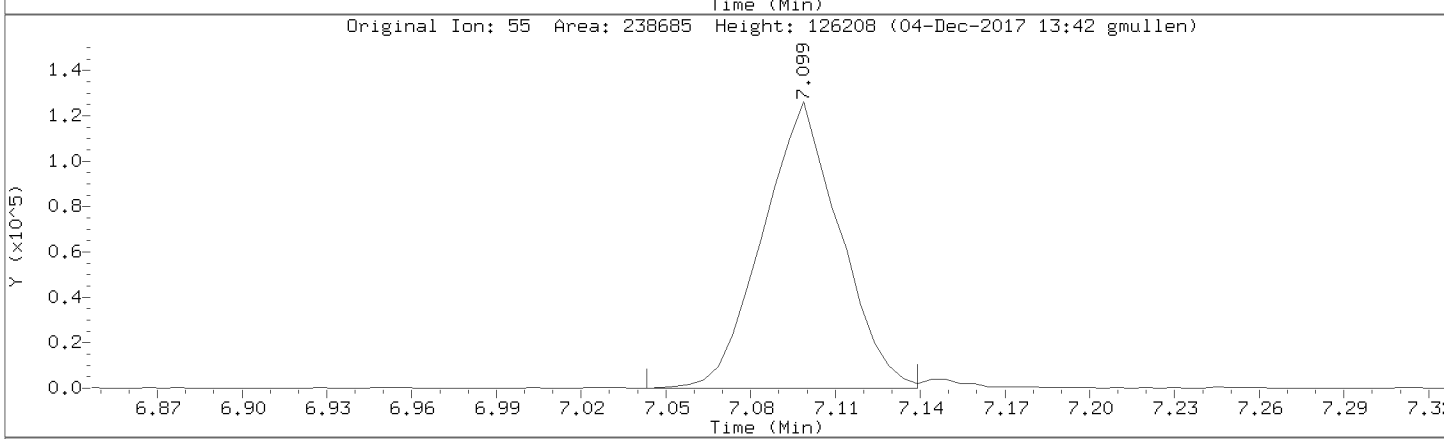
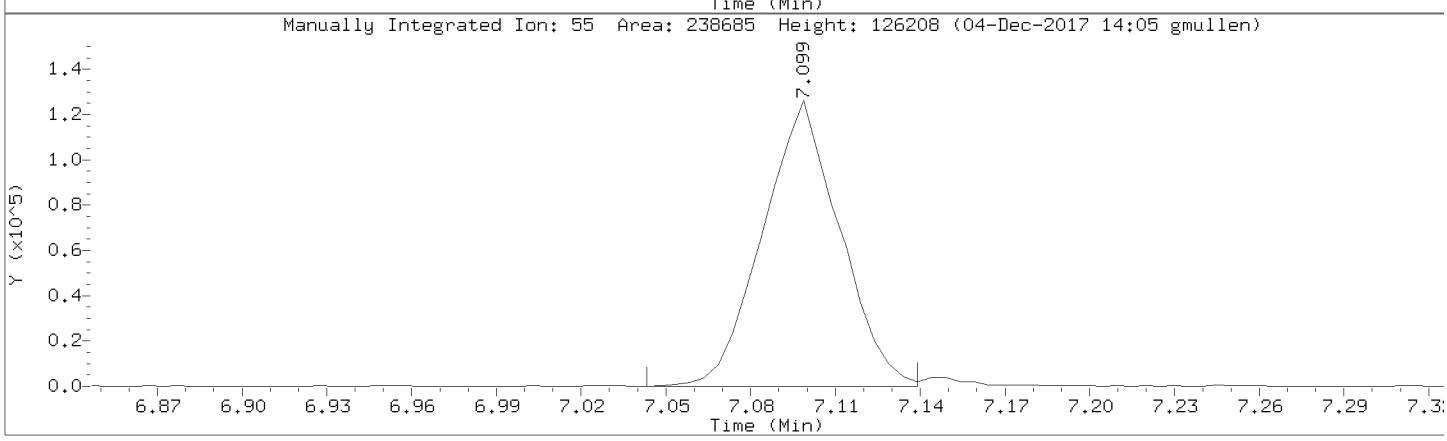
Injection Date: 04-DEC-2017 12:09
Instrument: 20msvd.i
Lab Sample ID: CAL4

Compound: Methylcyclohexane Review Code: GT
CAS Number: 108-87-2









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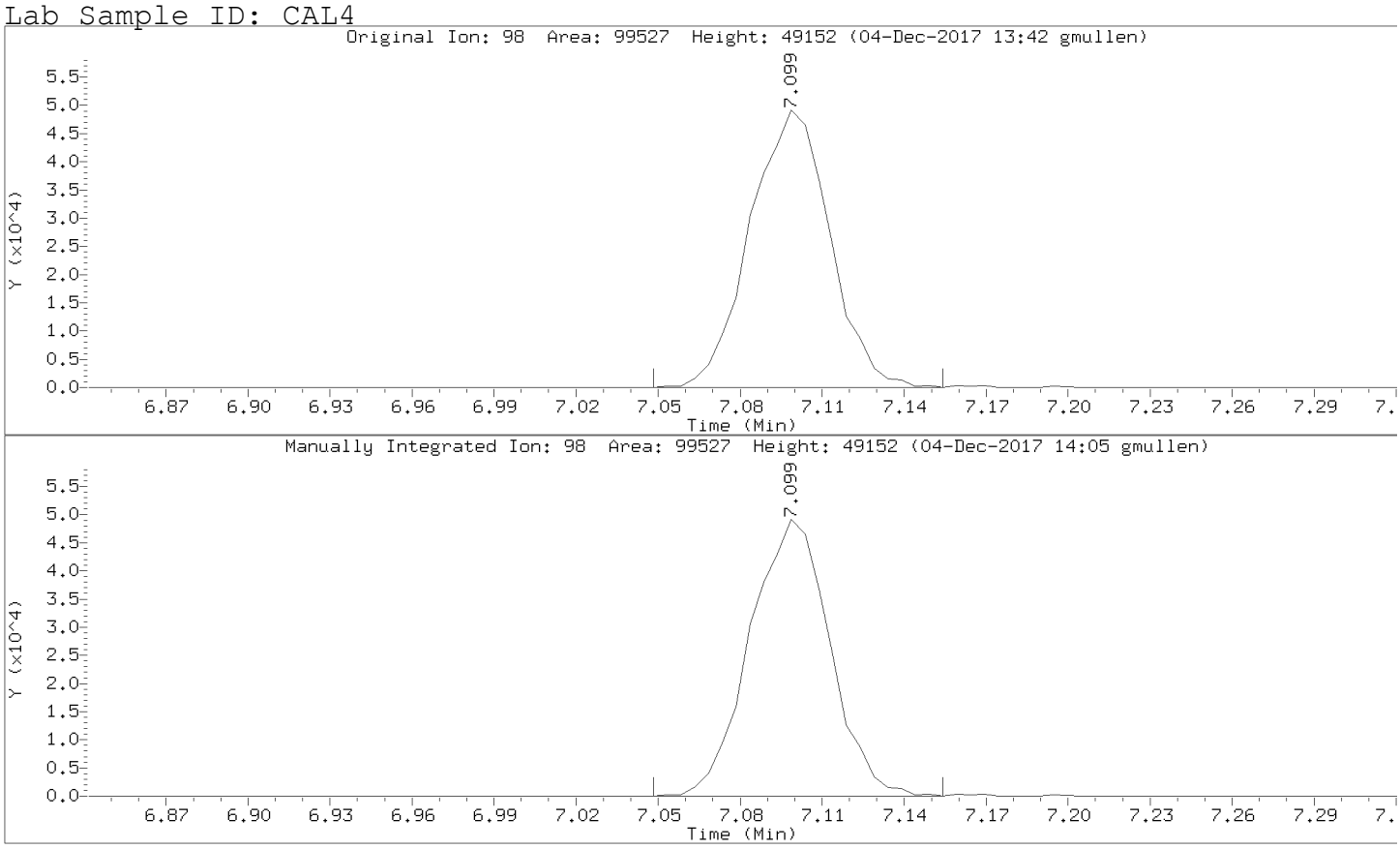
Lab Sample ID: CAL4



Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d13.d
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Inj Date : 04-DEC-2017 12:27
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Smp Info : cal5,54931:1
Misc Info : 7846
Comment : SW846 8260
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Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 12:27 Cal File: 1204d13.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.708	1.703	(0.257)	417028	50.0000	51.3
2 Chloromethane	50	1.899	1.894	(0.286)	670819	50.0000	49.2
3 Vinyl chloride	62	1.995	1.990	(0.300)	641721	50.0000	49.8
4 Bromomethane	94	2.343	2.338	(0.352)	261306	50.0000	45.1
5 Chloroethane	64	2.494	2.484	(0.375)	273812	50.0000	47.9(H)
6 Trichlorofluoromethane	101	2.655	2.640	(0.399)	514679	50.0000	49.6
7 1,1-Dichloroethene	96	3.249	3.250	(0.489)	321178	50.0000	54.9
8 Carbon disulfide	76	3.275	3.275	(0.492)	1016822	50.0000	51.2
9 1,1,2-Trichlorotrifluoroethane	101	3.325	3.325	(0.500)	370932	50.0000	54.3
10 Iodomethane	142	3.431	3.431	(0.516)	669082	50.0000	51.9
11 Acrolein	56	3.713	3.713	(0.558)	64996	50.0000	49.9
12 Allyl chloride	41	3.899	3.894	(0.586)	729017	50.0000	52.2
13 Methylene Chloride	84	4.055	4.046	(0.610)	328564	50.0000	49.3
14 Acetone	43	4.151	4.151	(0.624)	85813	50.0000	49.5
15 trans-1,2-Dichloroethene	96	4.282	4.277	(0.644)	336934	50.0000	51.2
16 Methyl Acetate	74	4.328	4.323	(0.651)	32299	50.0000	44.0
17 n-Hexane	57	4.398	4.393	(0.661)	722739	50.0000	51.8(M)
18 Methyl-tert-butyl ether	73	4.448	4.449	(0.669)	675629	50.0000	52.7
19 Acetonitrile	41	4.766	4.766	(0.717)	424425	500.000	504
20 Chloroprene	53	5.048	5.048	(0.759)	739749	50.0000	52.6
21 1,1-Dichloroethane	63	5.078	5.073	(0.764)	816972	50.0000	53.2
22 Acrylonitrile	53	5.154	5.154	(0.775)	126782	50.0000	48.2

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.401	5.396	(0.812)	1776312	50.0000	50.8
	24 cis-1,2-Dichloroethene	96	5.688	5.688	(0.855)	391511	50.0000	52.0
	25 2,2-Dichloropropane	77	5.814	5.809	(0.874)	420937	50.0000	52.9
	26 Cyclohexane	84	5.894	5.899	(0.886)	472637	50.0000	52.4
	27 Bromochloromethane	128	5.904	5.899	(0.888)	182273	50.0000	51.0
	28 Chloroform	83	5.985	5.985	(0.900)	622665	50.0000	54.7
	29 Carbon tetrachloride	117	6.121	6.116	(0.857)	484696	50.0000	53.4
	30 Tetrahydrofuran	42	6.151	6.156	(0.925)	124612	50.0000	49.0
	31 1,1,1-Trichloroethane	97	6.191	6.192	(0.931)	530143	50.0000	52.5
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	382794	50.0000	49.7
	33 1,1-Dichloropropene	75	6.317	6.312	(0.884)	476693	50.0000	51.1
	34 2-Butanone (MEK)	43	6.317	6.312	(0.950)	146672	50.0000	47.1
	35 Benzene	78	6.559	6.559	(0.918)	1369304	50.0000	52.6
	36 Propionitrile	54	6.600	6.600	(0.992)	464794	500.000	506
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	2210584	500.000	512
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	349751	50.0000	
	39 1,2-Dichloroethane	62	6.761	6.756	(0.946)	483607	50.0000	50.2
	40 Isobutanol	43	6.786	6.791	(1.020)	267065	1050.00	1040
	41 Methylcyclohexane	83	7.098	7.093	(0.994)	504454	50.0000	51.0(M)
	42 Trichloroethene	130	7.108	7.108	(0.995)	409219	50.0000	51.8
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1147098	50.0000	
	44 Dibromomethane	93	7.491	7.496	(1.049)	198364	50.0000	48.9
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	447154	50.0000	50.5
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	438615	50.0000	52.8
	47 Methyl methacrylate	41	7.809	7.804	(1.093)	651162	100.000	100
	48 1,4-Dioxane (p-Dioxane)	88	7.844	7.849	(1.098)	42896	1000.00	1060(M)
	49 2-Chloroethyl vinyl ether	63	8.222	8.222	(1.151)	440922	100.000	99.6
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	524030	50.0000	54.6
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1268237	50.0000	49.4
	52 Toluene	91	8.544	8.539	(1.196)	1450415	50.0000	53.3
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	357674	50.0000	51.8
	54 4-Methyl-2-Pentanone	43	8.907	8.902	(0.910)	327256	50.0000	50.6
	55 trans-1,3-Dichloropropene	75	8.927	8.932	(1.250)	431869	50.0000	53.9
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	273975	50.0000	50.9
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	253880	50.0000	50.6
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	309312	50.0000	55.6
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	408098	50.0000	50.8
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	264597	50.0000	50.1
	61 2-Hexanone	43	9.577	9.577	(0.978)	212614	50.0000	47.7
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	521108	50.0000	
	63 Chlorobenzene	112	9.798	9.799	(1.001)	933448	50.0000	51.4
	64 Ethylbenzene	91	9.814	9.814	(1.003)	1549058	50.0000	50.5
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	350604	50.0000	53.4
	66 m&p-Xylene	106	9.914	9.914	(1.013)	1205195	100.000	102
	67 o-Xylene	106	10.207	10.207	(1.043)	569263	50.0000	52.0
	68 Styrene	104	10.242	10.242	(1.046)	935000	50.0000	52.4
	69 Bromoform	173	10.262	10.267	(1.048)	217182	50.0000	56.0
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	1464745	50.0000	50.8
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	526475	50.0000	48.9
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	164653	100.000	111(M)
	73 Bromobenzene	156	10.655	10.655	(0.948)	411761	50.0000	50.4
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	1704875	50.0000	51.0
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	292645	50.0000	53.4
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	1037855	50.0000	51.3

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	1079884	50.0000	51.1
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	77953	50.0000	49.8
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	950022	50.0000	51.0
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	599848	50.0000	52.5
81 Pentachloroethane	167	10.982	10.982	(0.978)	248710	50.0000	51.8
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	1074003	50.0000	51.7
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	1383925	50.0000	51.9
84 p-Isopropyltoluene	119	11.133	11.134	(0.991)	1132872	50.0000	52.7
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	670555	50.0000	51.6
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	544410	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.244	(1.000)	669738	50.0000	50.8
88 n-Butylbenzene	91	11.365	11.365	(1.012)	1000891	50.0000	52.4
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	589210	50.0000	51.8
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	83549	50.0000	54.1
91 Hexachloro-1,3-butadiene	225	12.282	12.282	(1.093)	171914	50.0000	54.5
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	282654	50.0000	52.6
93 Naphthalene	128	12.539	12.544	(1.116)	500788	50.0000	50.9
94 1,2,3-Trichlorobenzene	180	12.665	12.670	(1.127)	204327	50.0000	49.6

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d13.d
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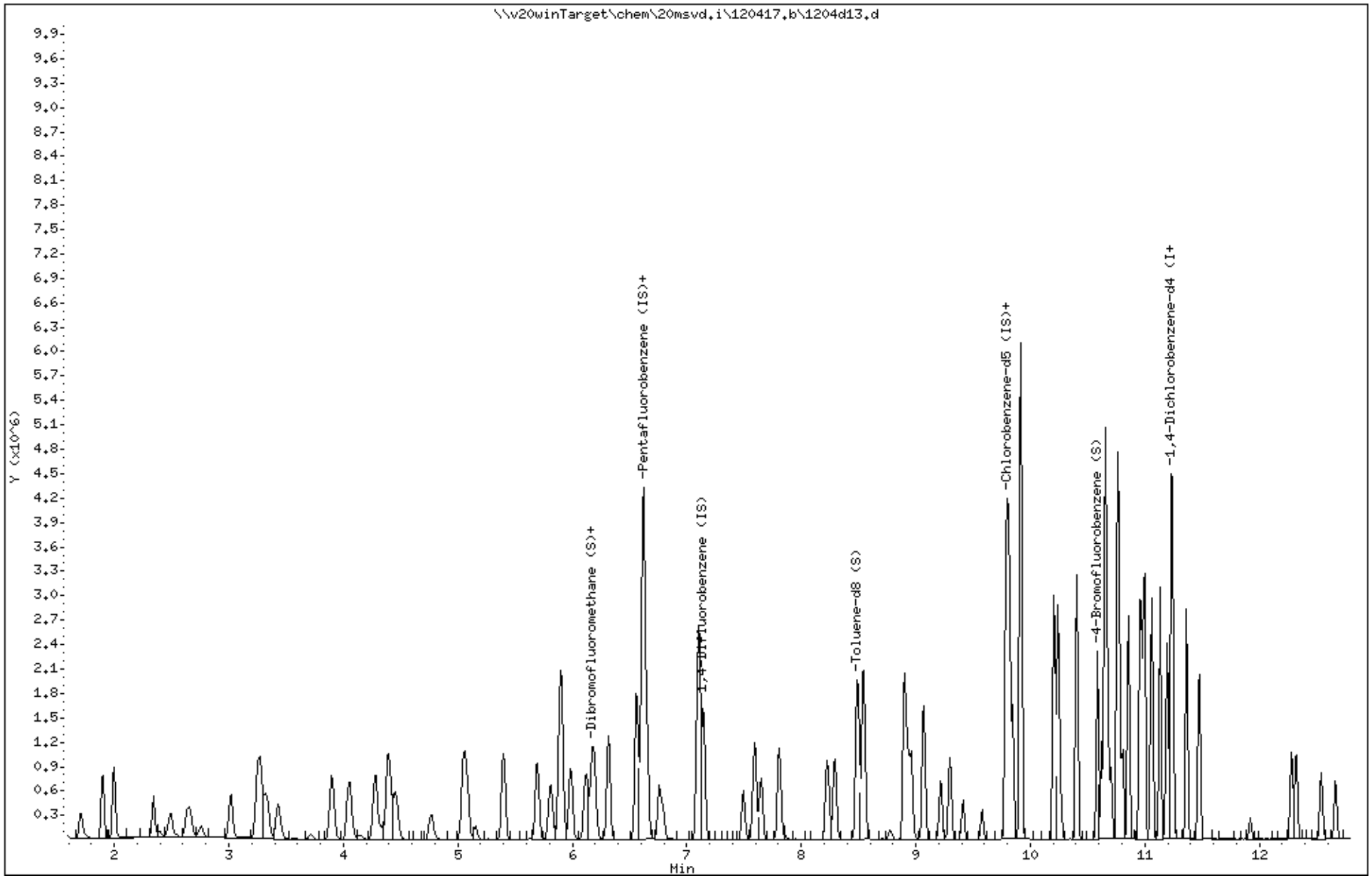

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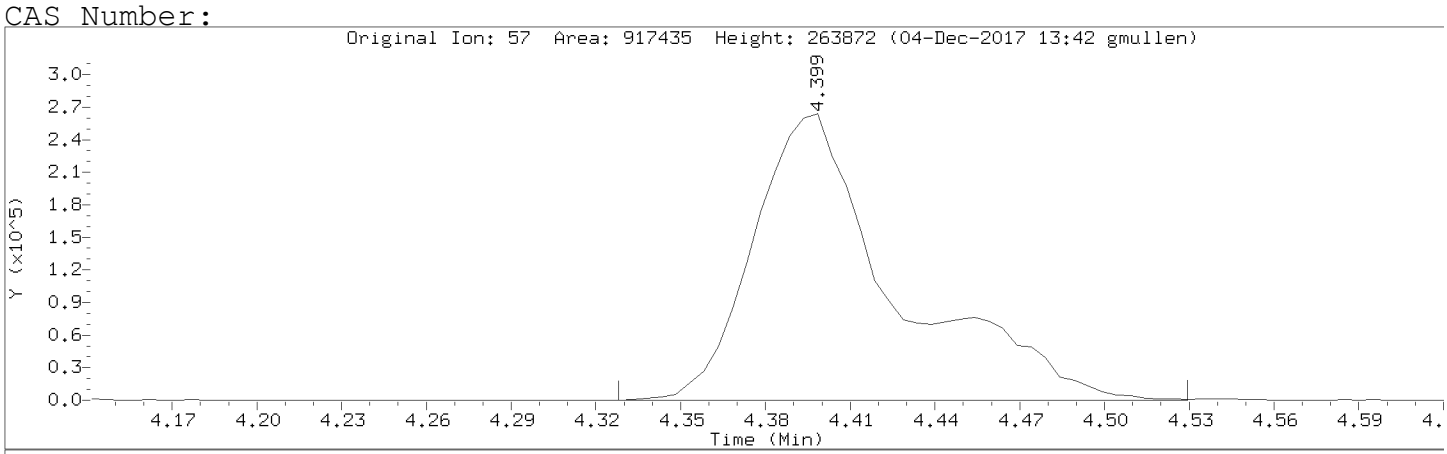
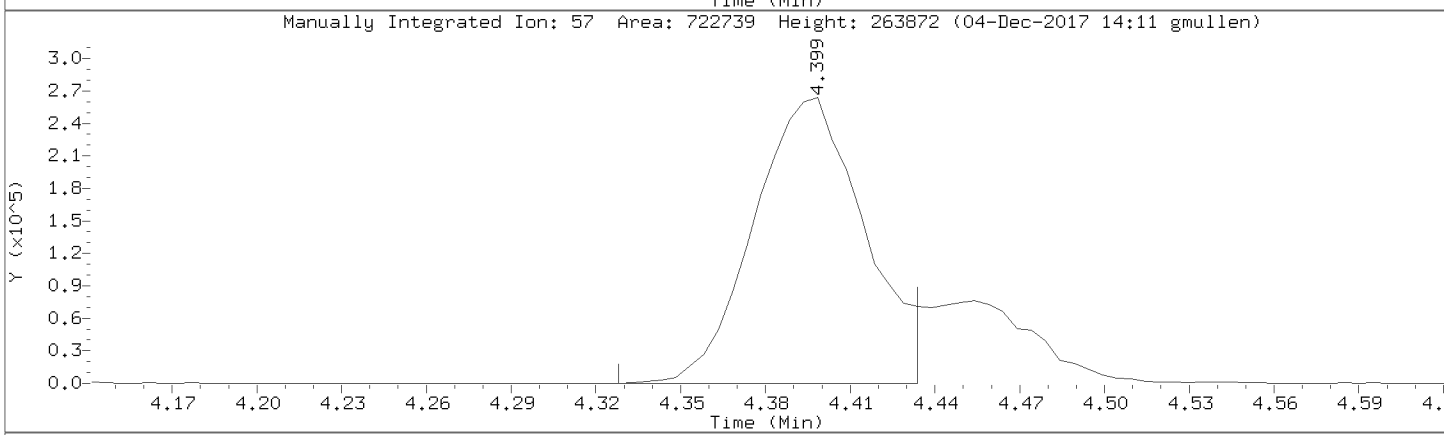
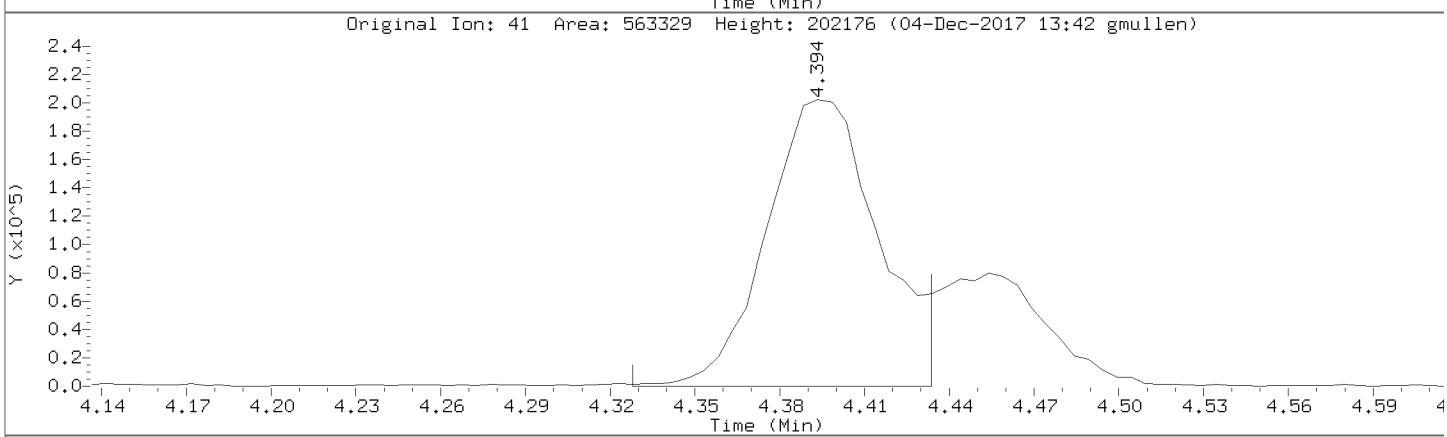
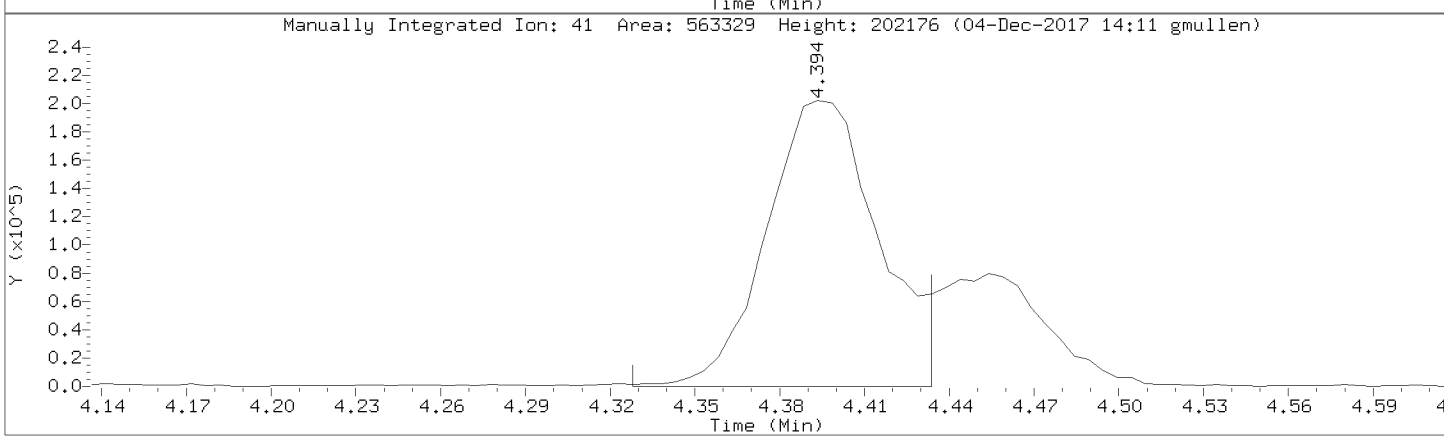
Instrument: 20msvd.i
Lab Sample ID: CAL5

Compound: n-Hexane Review Code: GT
CAS Number:









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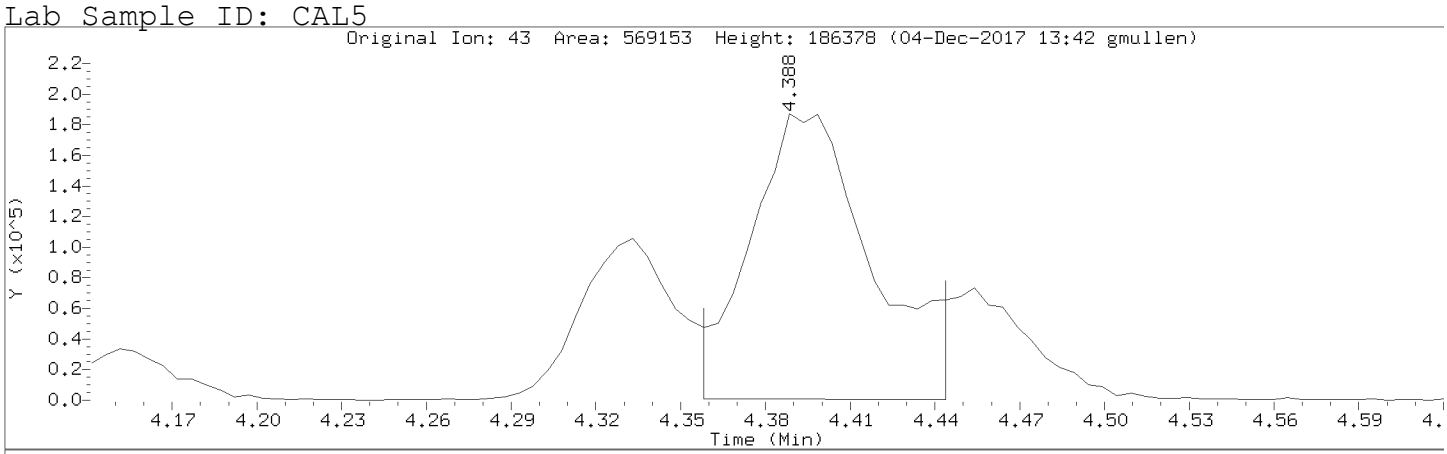

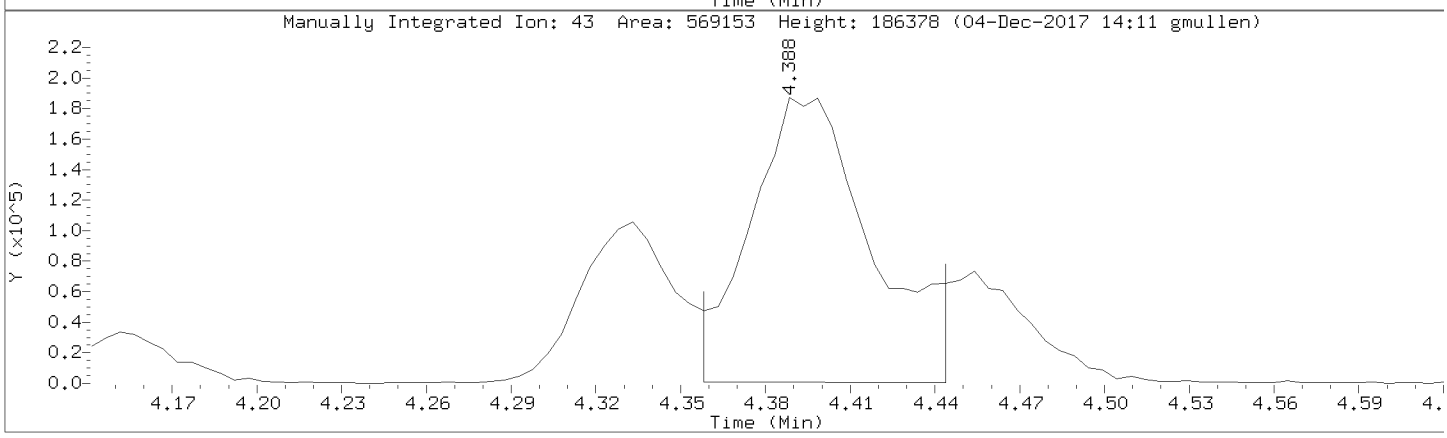

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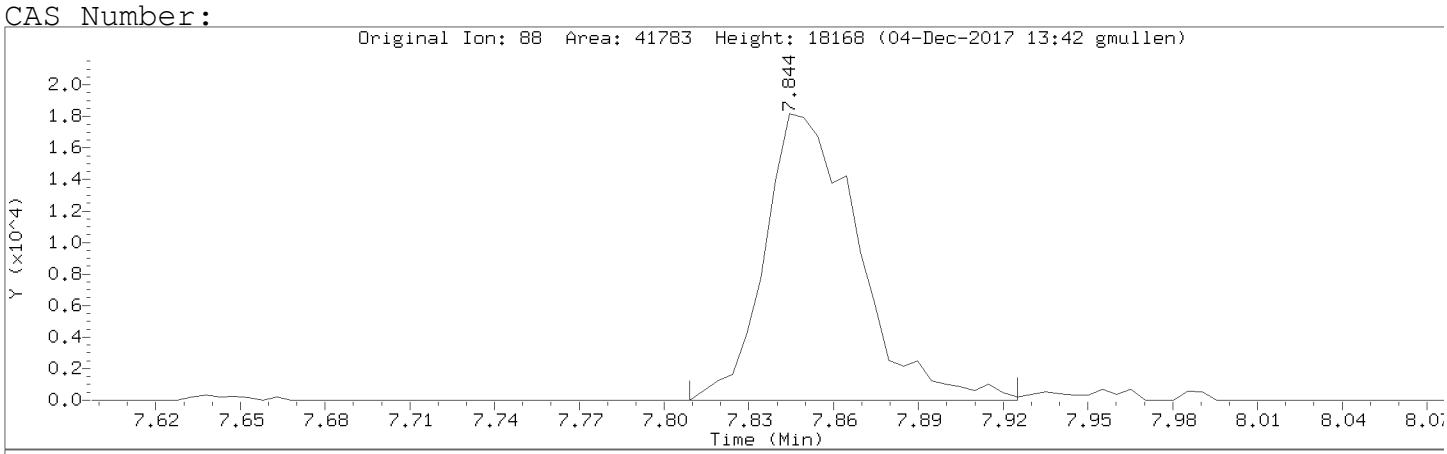
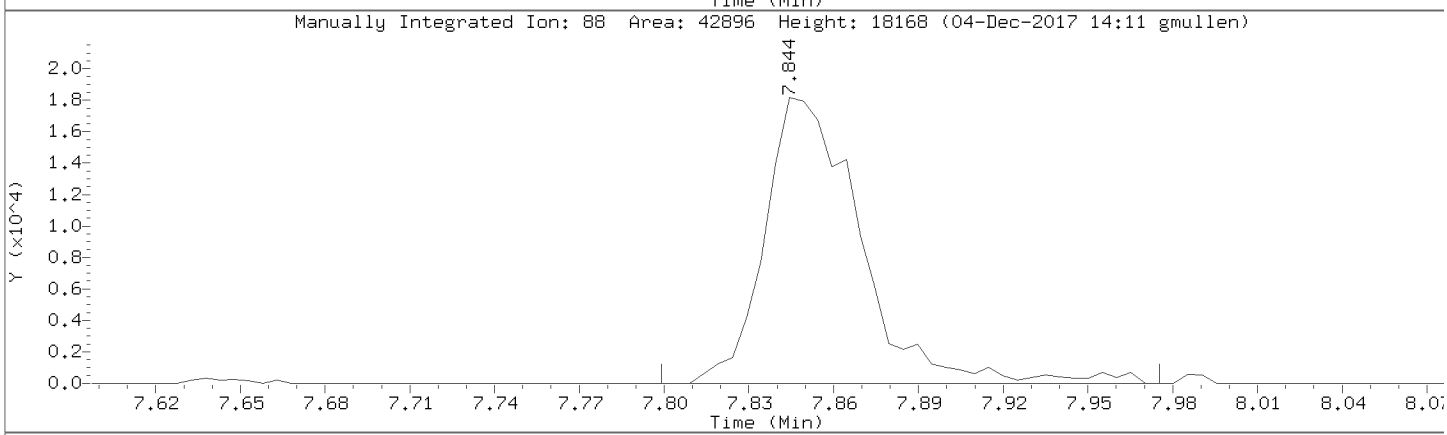
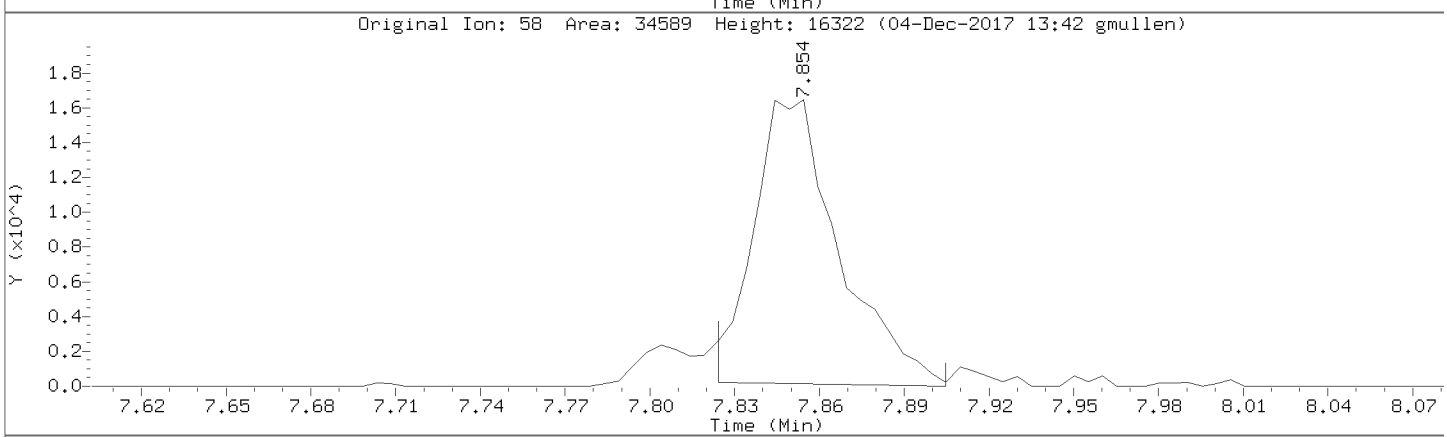
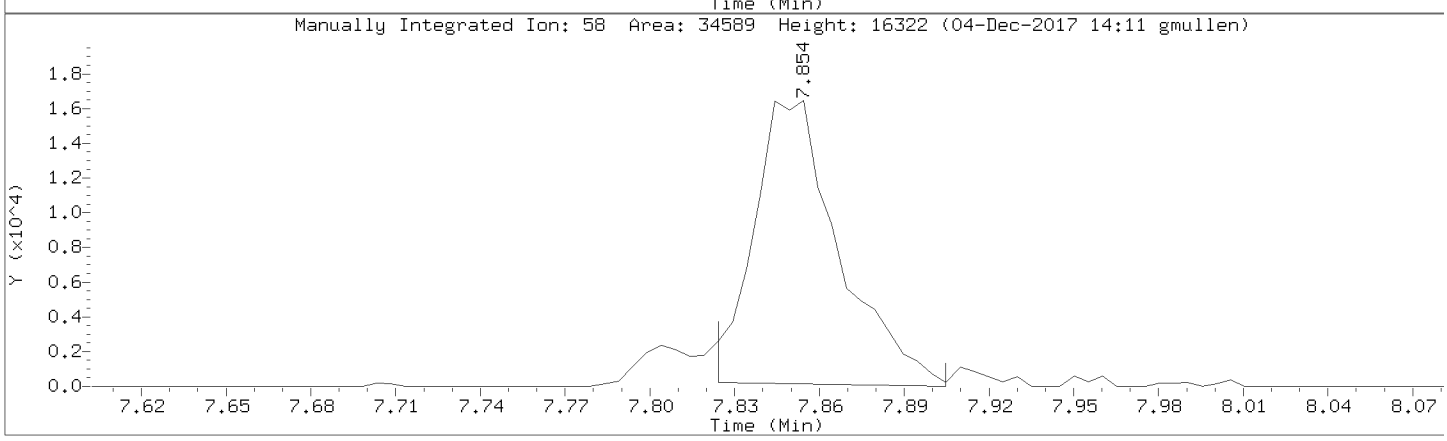
Injection Date: 04-DEC-2017 12:27
Instrument: 20msvd.i
Lab Sample ID: CAL5

Compound: 1,4-Dioxane (p-Dioxane) Review Code: LT
CAS Number:









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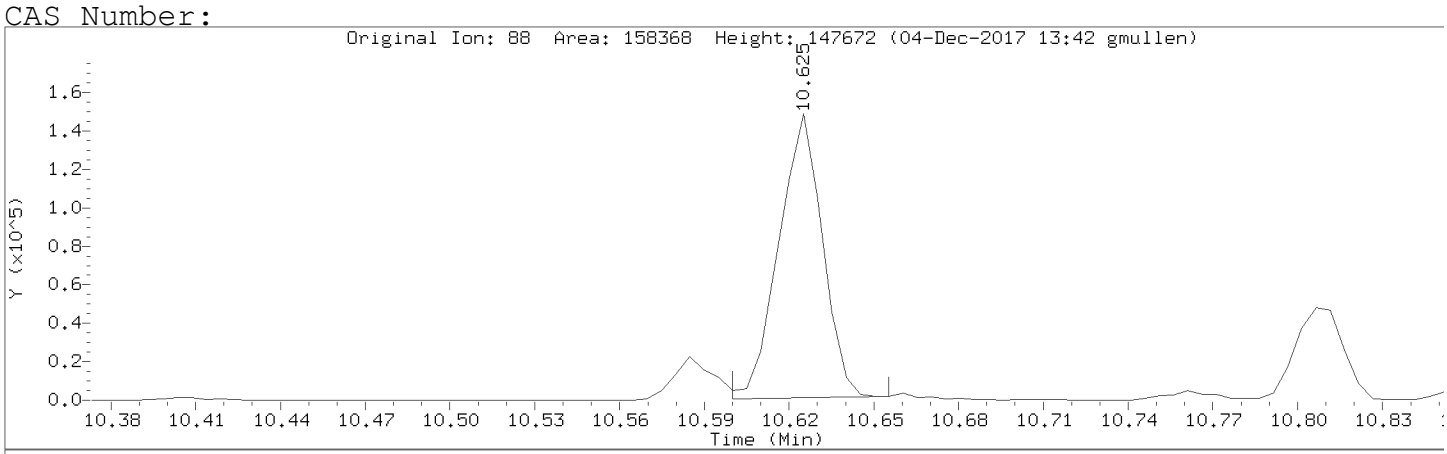
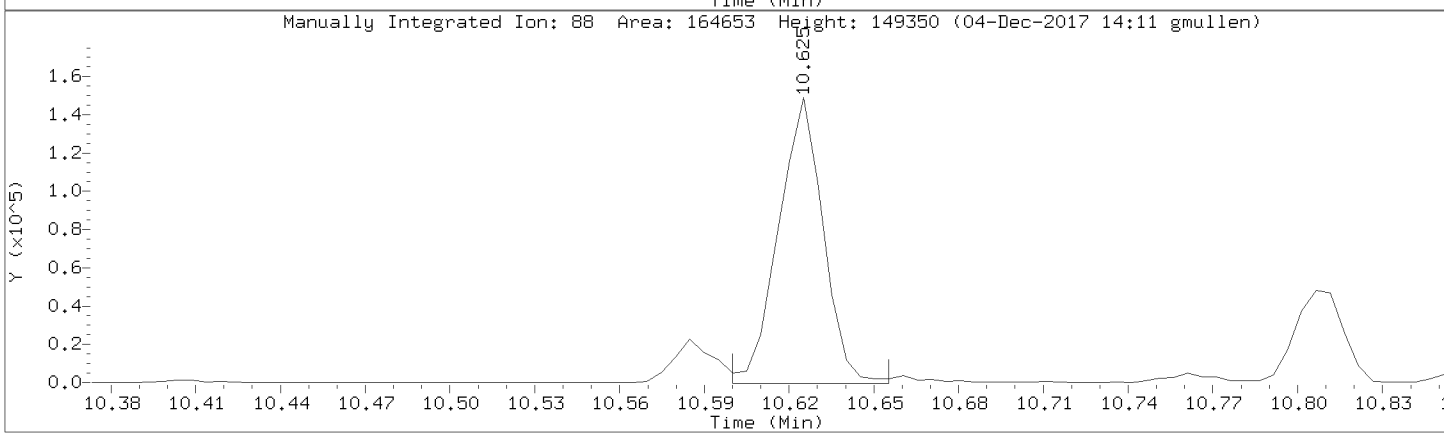
Injection Date: 04-DEC-2017 12:27
Instrument: 20msvd.i
Lab Sample ID: CAL5

Compound: trans-1,4-Dichloro-2-butene Review Code: LT
CAS Number:





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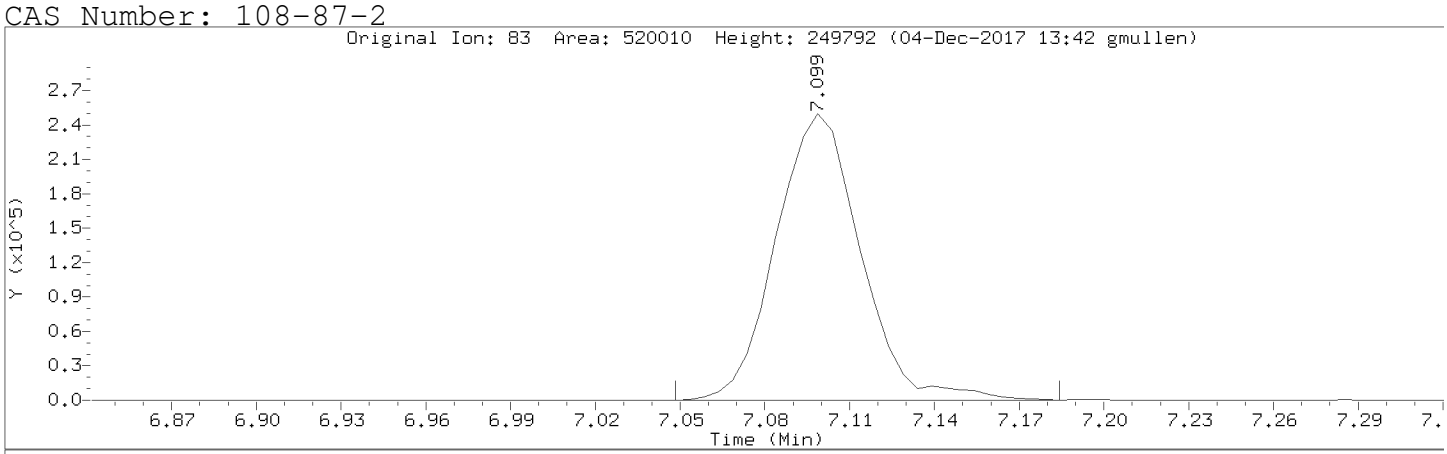
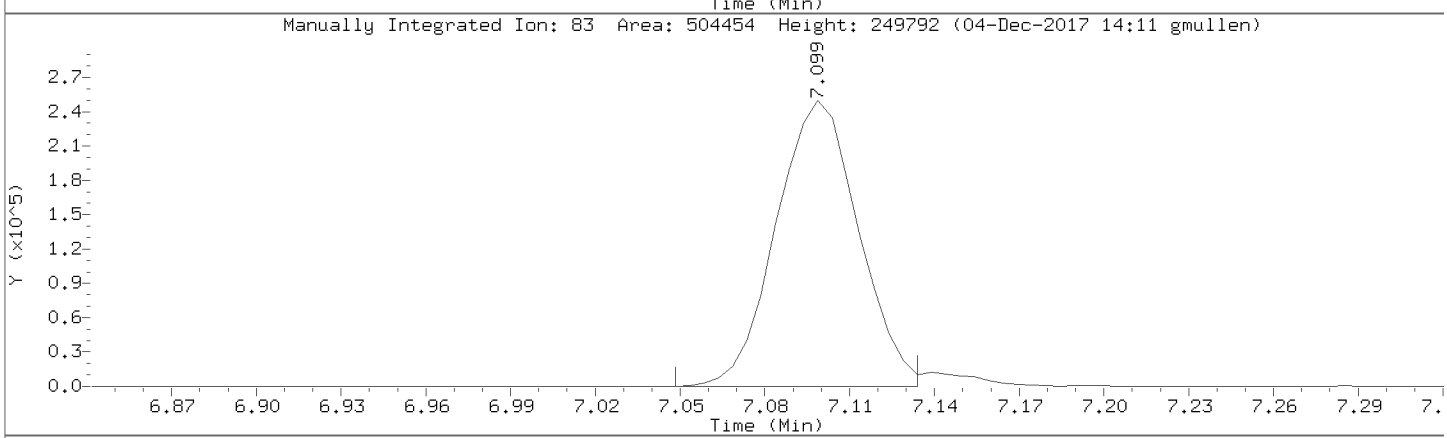
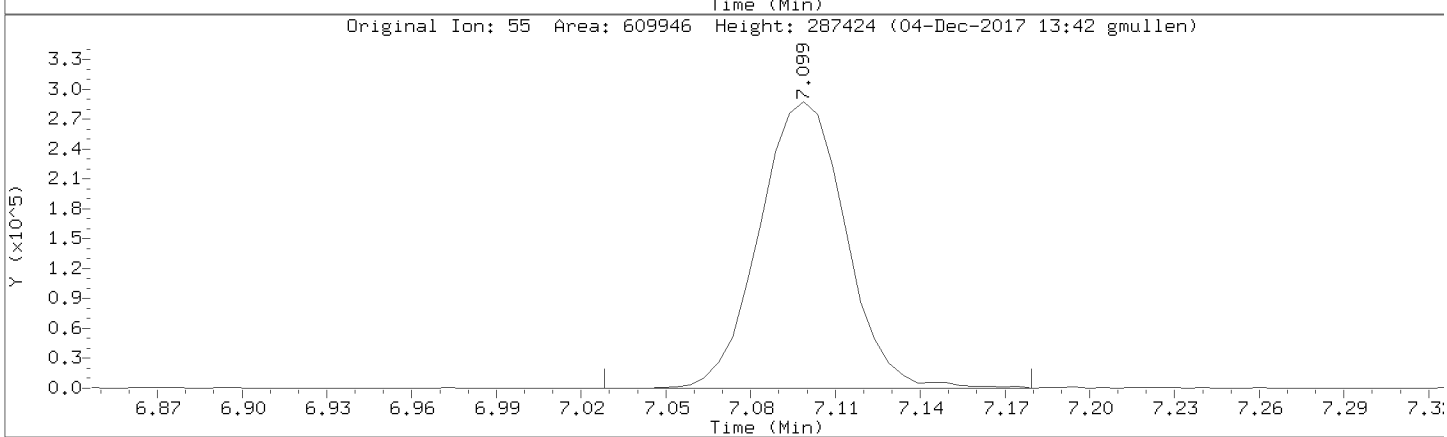
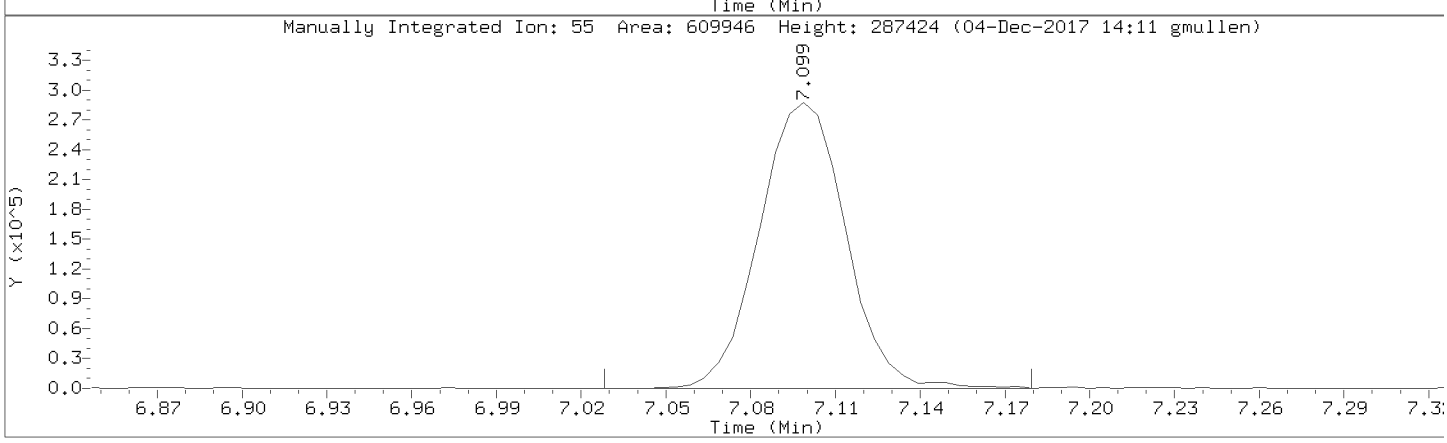
Instrument: 20msvd.i
Lab Sample ID: CAL5

Compound: Methylcyclohexane Review Code: GT
CAS Number: 108-87-2









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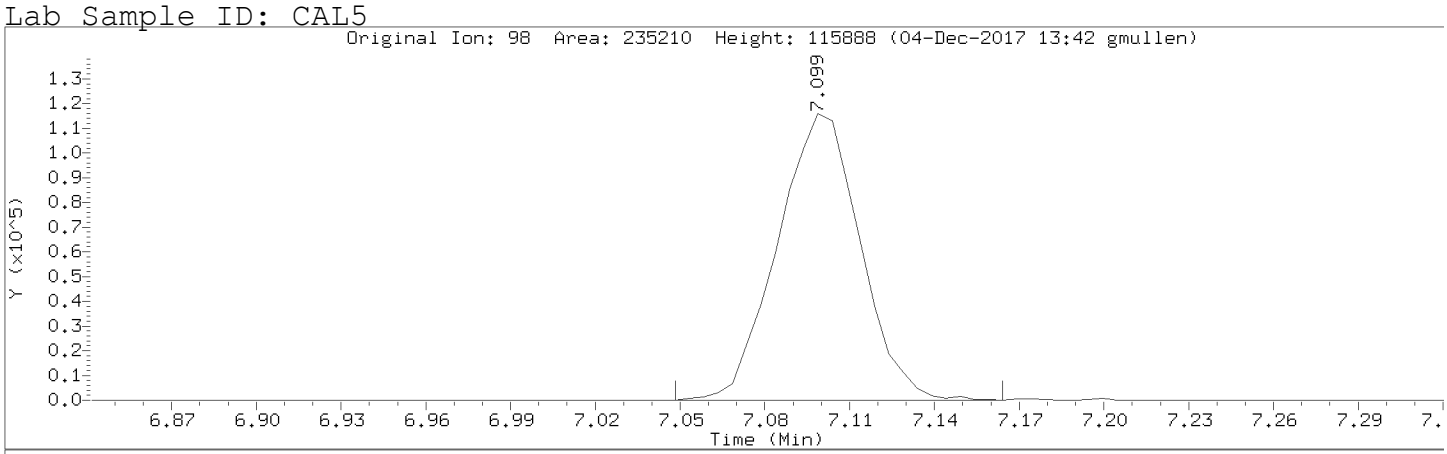

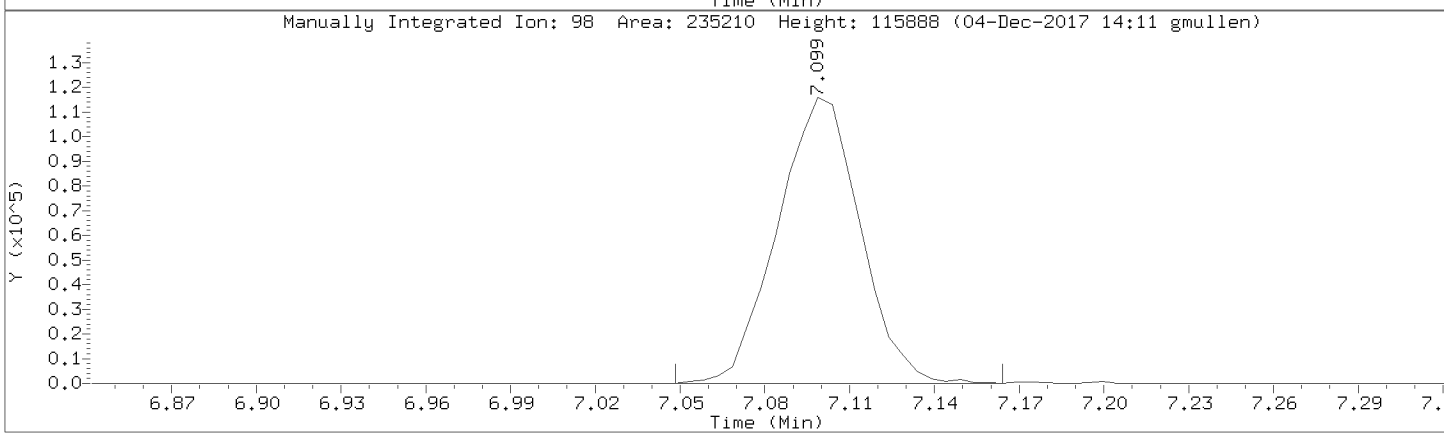

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d14.d
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Inj Date : 04-DEC-2017 12:44
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal6,54932:1
Misc Info : 7846
Comment : SW846 8260
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Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 12:44 Cal File: 1204d14.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	873407	100.000	102
2 Chloromethane	50	1.894	1.894	(0.285)	1419551	100.000	97.8
3 Vinyl chloride	62	1.995	1.990	(0.300)	1331719	100.000	96.8
4 Bromomethane	94	2.338	2.338	(0.352)	529598	100.000	97.0
5 Chloroethane	64	2.464	2.484	(0.371)	572576	100.000	91.6(H)
6 Trichlorofluoromethane	101	2.650	2.640	(0.399)	1104652	100.000	99.0
7 1,1-Dichloroethene	96	3.245	3.250	(0.488)	690660	100.000	107
8 Carbon disulfide	76	3.270	3.275	(0.492)	2144164	100.000	102
9 1,1,2-Trichlorotrifluoroethane	101	3.325	3.325	(0.500)	771790	100.000	106
10 Iodomethane	142	3.426	3.431	(0.515)	1373945	100.000	101
11 Acrolein	56	3.713	3.713	(0.558)	136753	100.000	99.4
12 Allyl chloride	41	3.894	3.894	(0.586)	1528127	100.000	103
13 Methylene Chloride	84	4.046	4.046	(0.608)	698691	100.000	105
14 Acetone	43	4.146	4.151	(0.624)	182044	100.000	78.6
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.643)	722854	100.000	103
16 Methyl Acetate	74	4.328	4.323	(0.651)	77110	100.000	105
17 n-Hexane	57	4.393	4.393	(0.661)	1505523	100.000	101(M)
18 Methyl-tert-butyl ether	73	4.449	4.449	(0.669)	1453748	100.000	106
19 Acetonitrile	41	4.766	4.766	(0.717)	914491	1000.00	1020
20 Chloroprene	53	5.048	5.048	(0.759)	1547034	100.000	103
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	1720050	100.000	105
22 Acrylonitrile	53	5.154	5.154	(0.775)	282508	100.000	100
23 Vinyl acetate	43	5.396	5.396	(0.811)	3923614	100.000	106

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 cis-1,2-Dichloroethene	96	5.693	5.688	(0.856)	820549	100.000	102
	25 2,2-Dichloropropane	77	5.809	5.809	(0.874)	829903	100.000	97.7
	26 Cyclohexane	84	5.894	5.899	(0.886)	1000731	100.000	104
	27 Bromochloromethane	128	5.899	5.899	(0.887)	386562	100.000	101
	28 Chloroform	83	5.985	5.985	(0.900)	1326550	100.000	109
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	1049181	100.000	111
	30 Tetrahydrofuran	42	6.151	6.156	(0.925)	272756	100.000	101
	31 1,1,1-Trichloroethane	97	6.192	6.192	(0.931)	1109553	100.000	103
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	411794	50.0000	49.4
	33 1,1-Dichloropropene	75	6.318	6.312	(0.884)	1007665	100.000	104
	34 2-Butanone (MEK)	43	6.312	6.312	(0.949)	325926	100.000	93.7
	35 Benzene	78	6.559	6.559	(0.918)	2846212	100.000	105
	36 Propionitrile	54	6.600	6.600	(0.992)	1022631	1000.00	1040
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	4858659	1000.00	1050
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	380410	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	1023701	100.000	102
	40 Isobutanol	43	6.786	6.791	(1.020)	632792	2100.00	2300
	41 Methylcyclohexane	83	7.098	7.093	(0.994)	1096526	100.000	108
	42 Trichloroethene	130	7.108	7.108	(0.995)	872504	100.000	107
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1202049	50.0000	
	44 Dibromomethane	93	7.491	7.496	(1.049)	437133	100.000	104
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	964228	100.000	105
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	912622	100.000	105
	47 Methyl methacrylate	41	7.804	7.804	(1.092)	1442280	200.000	213
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.849	(1.099)	93251	2000.00	2210(M)
	49 2-Chloroethyl vinyl ether	63	8.227	8.222	(1.152)	953949	200.000	206
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	1139466	100.000	114
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1340071	50.0000	49.8
	52 Toluene	91	8.539	8.539	(1.195)	2978001	100.000	105
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	778819	100.000	109
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	729986	100.000	108
	55 trans-1,3-Dichloropropene	75	8.927	8.932	(1.250)	942740	100.000	112
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	617830	100.000	110
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	541942	100.000	104
	58 Dibromochloromethane	129	9.219	9.214	(0.942)	689931	100.000	98.8
	59 1,3-Dichloropropane	76	9.295	9.300	(0.950)	866240	100.000	104
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	553126	100.000	100
	61 2-Hexanone	43	9.577	9.577	(0.978)	479604	100.000	101
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	539729	50.0000	
	63 Chlorobenzene	112	9.804	9.799	(1.002)	2023210	100.000	108
	64 Ethylbenzene	91	9.814	9.814	(1.003)	3318376	100.000	105
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	737252	100.000	108
	66 m&p-Xylene	106	9.914	9.914	(1.013)	2558356	200.000	209
	67 o-Xylene	106	10.207	10.207	(1.043)	1222005	100.000	108
	68 Styrene	104	10.242	10.242	(1.046)	1967697	100.000	107
	69 Bromoform	173	10.262	10.267	(1.048)	496262	100.000	96.8
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	3167451	100.000	104
$	71 4-Bromofluorobenzene (S)	176	10.584	10.589	(0.942)	563145	50.0000	49.2
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	383595	200.000	185
	73 Bromobenzene	156	10.655	10.655	(0.948)	890916	100.000	103
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	3617740	100.000	102
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	623627	100.000	98.7
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	2187896	100.000	102
	77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	2320209	100.000	104

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	165355	100.000	99.4
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	2049212	100.000	104
80 tert-Butylbenzene	91	10.957	10.962	(0.975)	1249130	100.000	103
81 Pentachloroethane	167	10.982	10.982	(0.978)	538541	100.000	106
82 1,2,4-Trimethylbenzene	105	10.998	10.998	(0.979)	2234377	100.000	102
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	2897034	100.000	103
84 p-Isopropyltoluene	119	11.134	11.134	(0.991)	2411740	100.000	106
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	1437849	100.000	105
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	578218	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	1432799	100.000	103
88 n-Butylbenzene	91	11.365	11.365	(1.012)	2104588	100.000	104
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	1268078	100.000	106
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	195008	100.000	98.5
91 Hexachloro-1,3-butadiene	225	12.282	12.282	(1.093)	369917	100.000	101
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	629849	100.000	98.2
93 Naphthalene	128	12.539	12.544	(1.116)	1142489	100.000	110
94 1,2,3-Trichlorobenzene	180	12.665	12.670	(1.127)	464860	100.000	106

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d14.d

Date : 04-DEC-2017 12:44

Client ID: CAL6

Instrument: 20msvd.i

Sample Info: CAL6,54932:1

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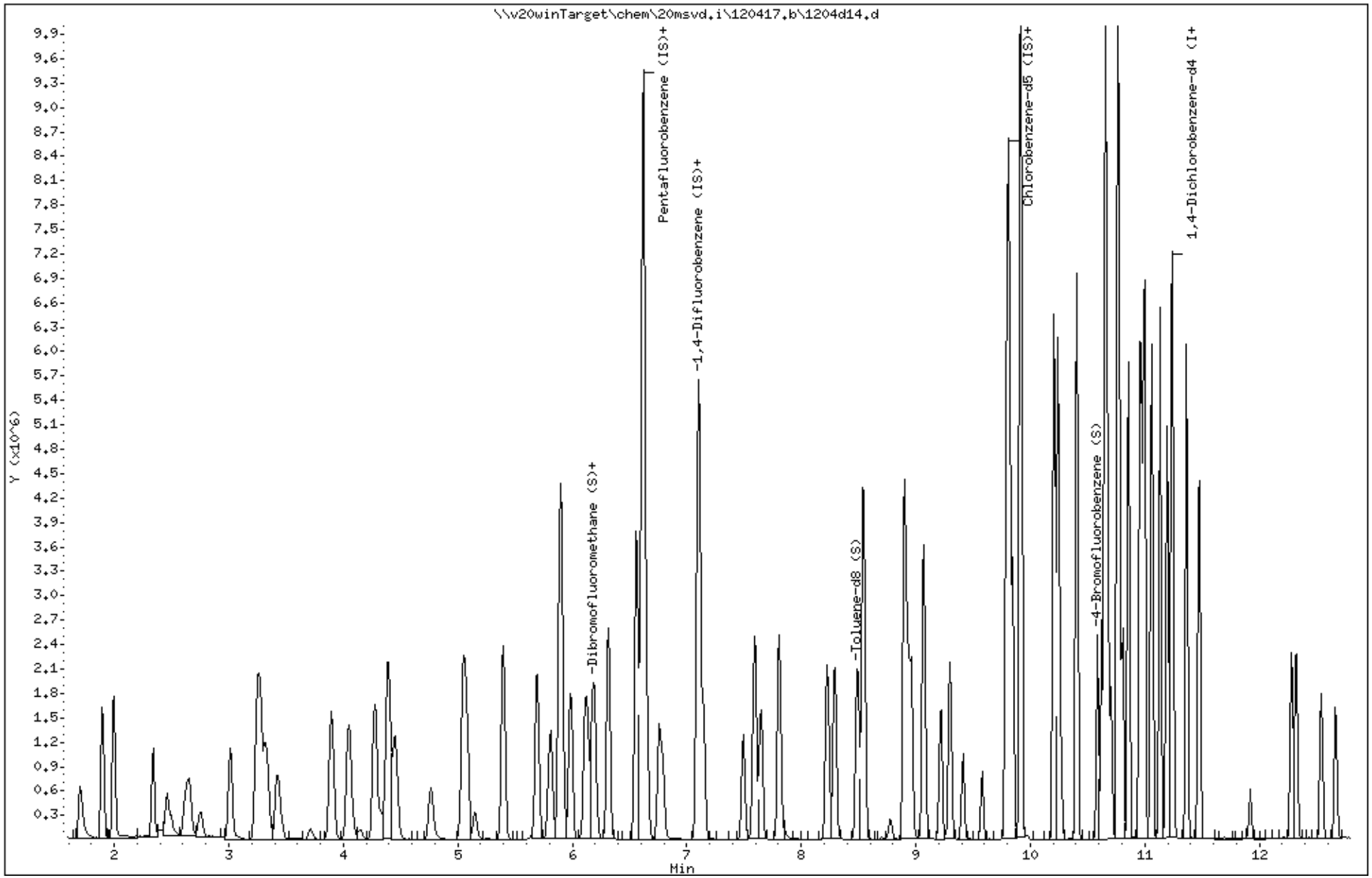
Operator: GEM

Column phase: RTX VMS 30m

Column diameter: 0.25



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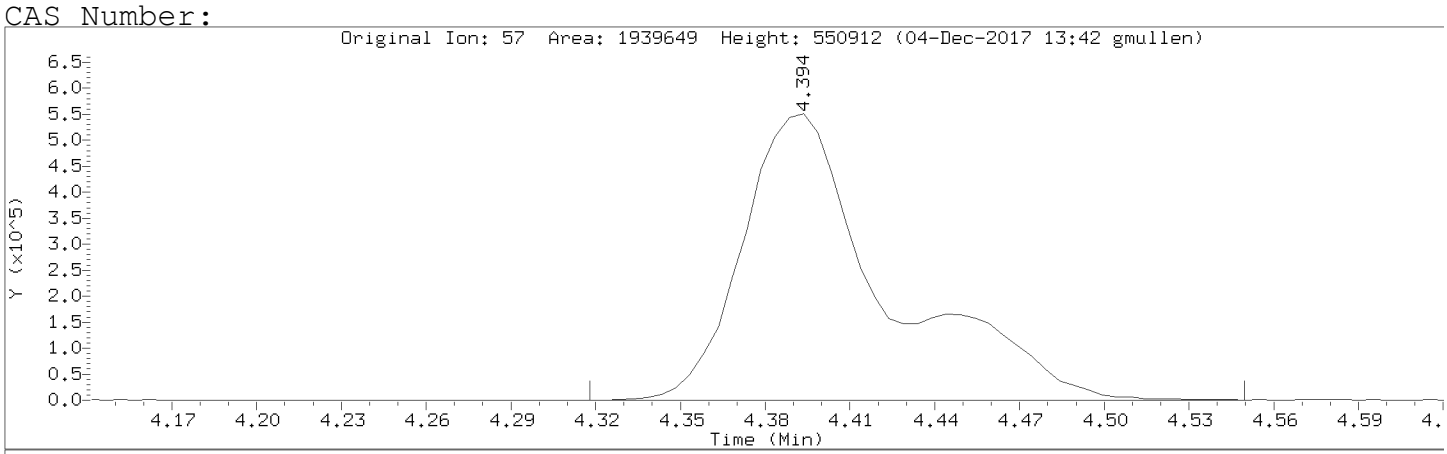
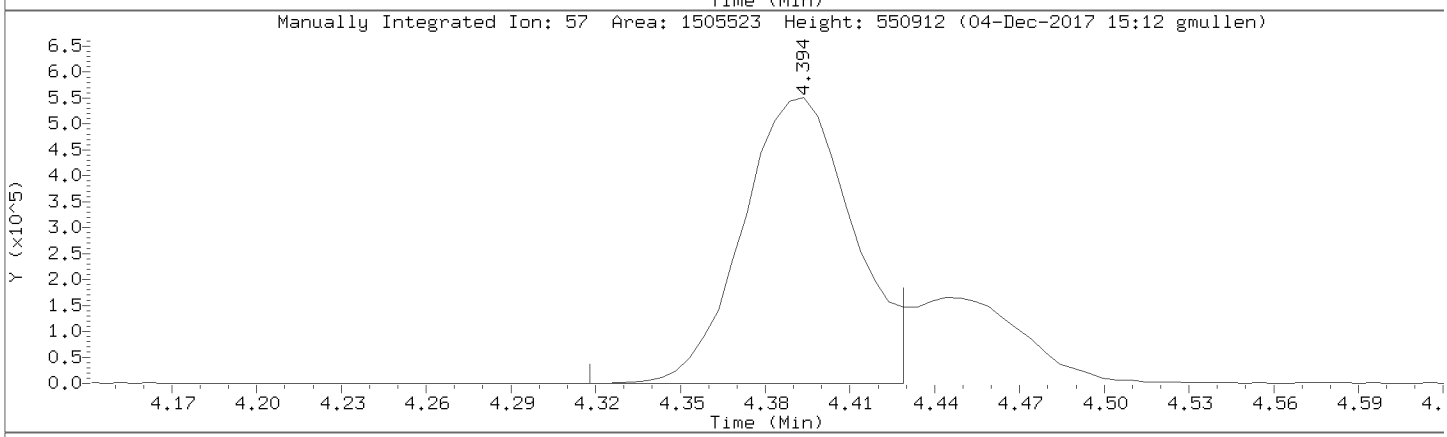
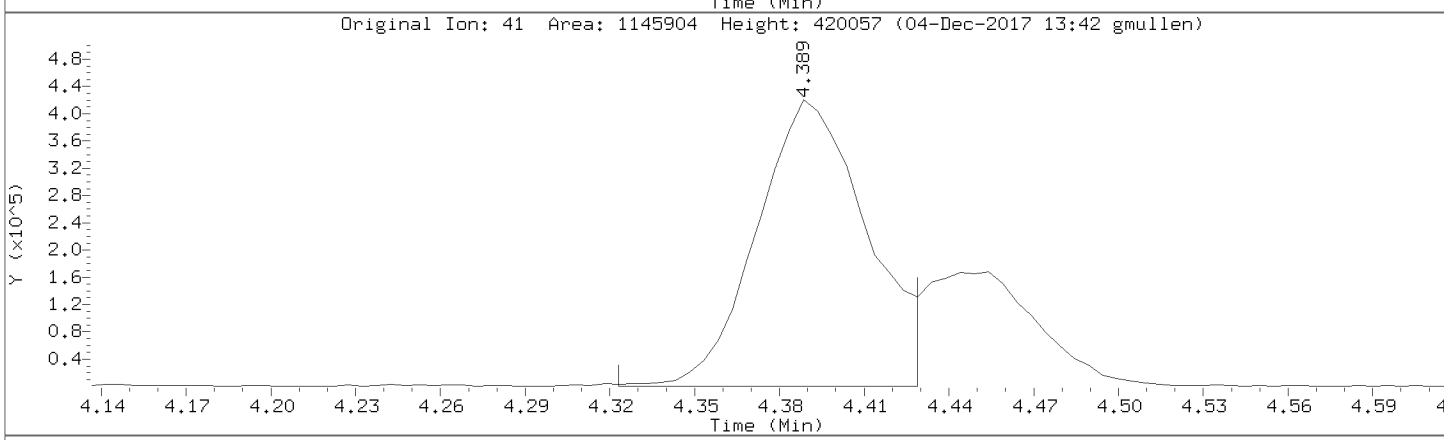
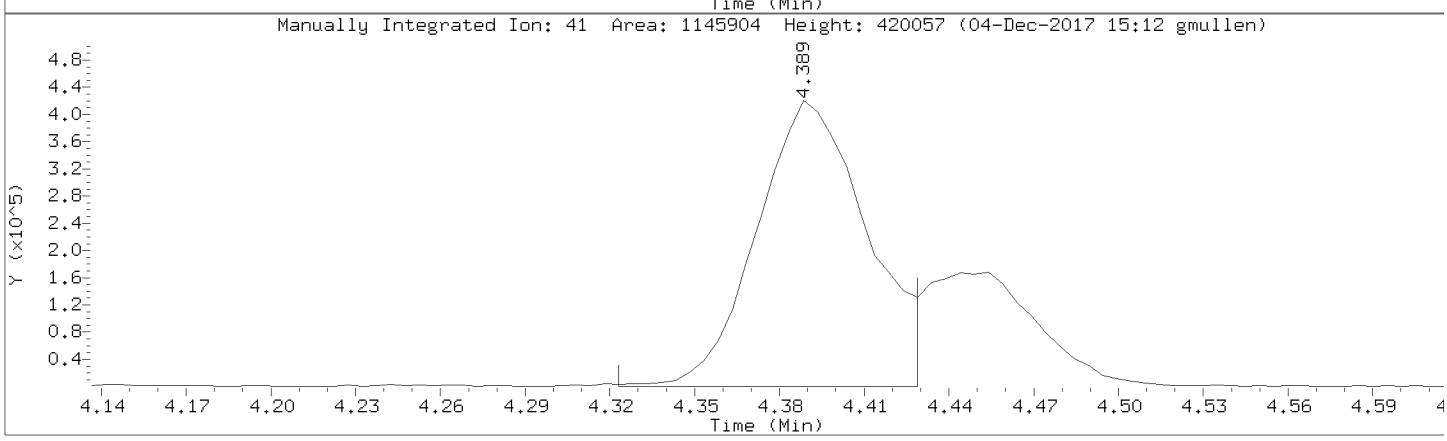
Injection Date: 04-DEC-2017 12:44
Instrument: 20msvd.i
Lab Sample ID: CAL6

Compound: n-Hexane Review Code: GT
CAS Number:









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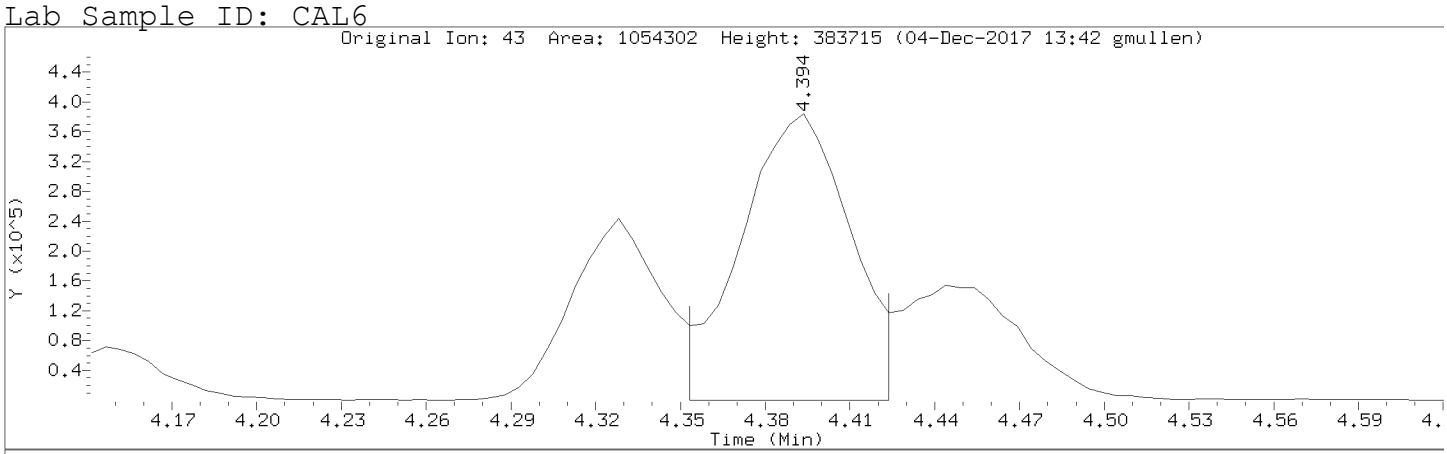
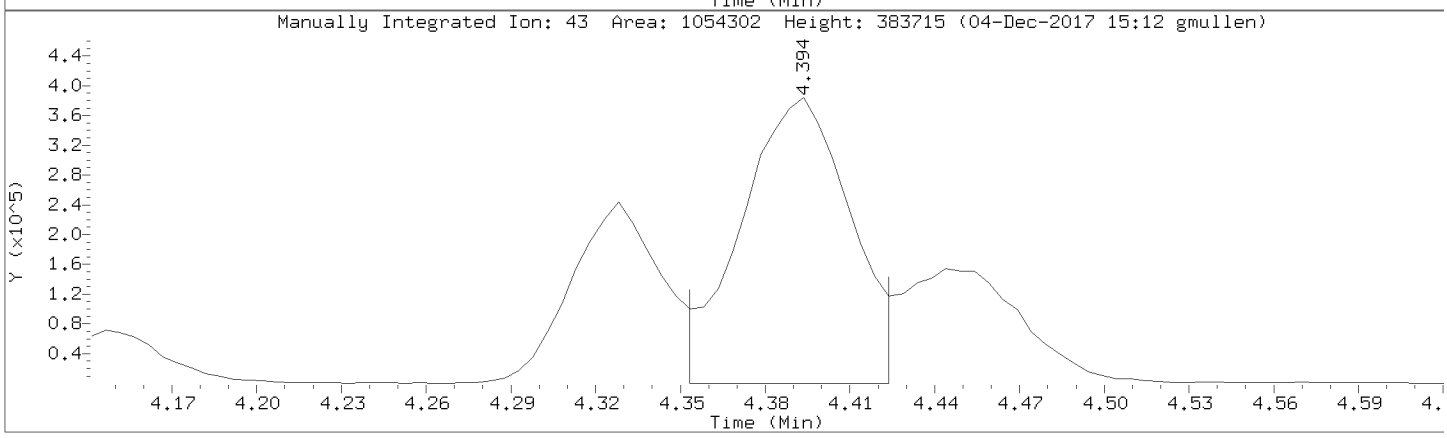
Instrument: 20msvd.i
Lab Sample ID: CAL6





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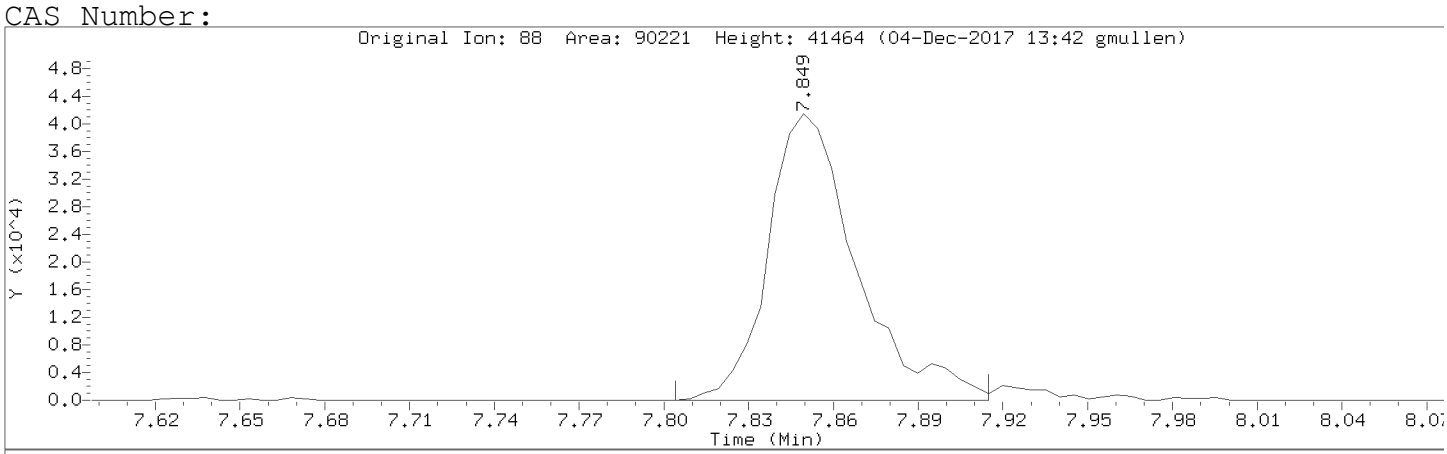
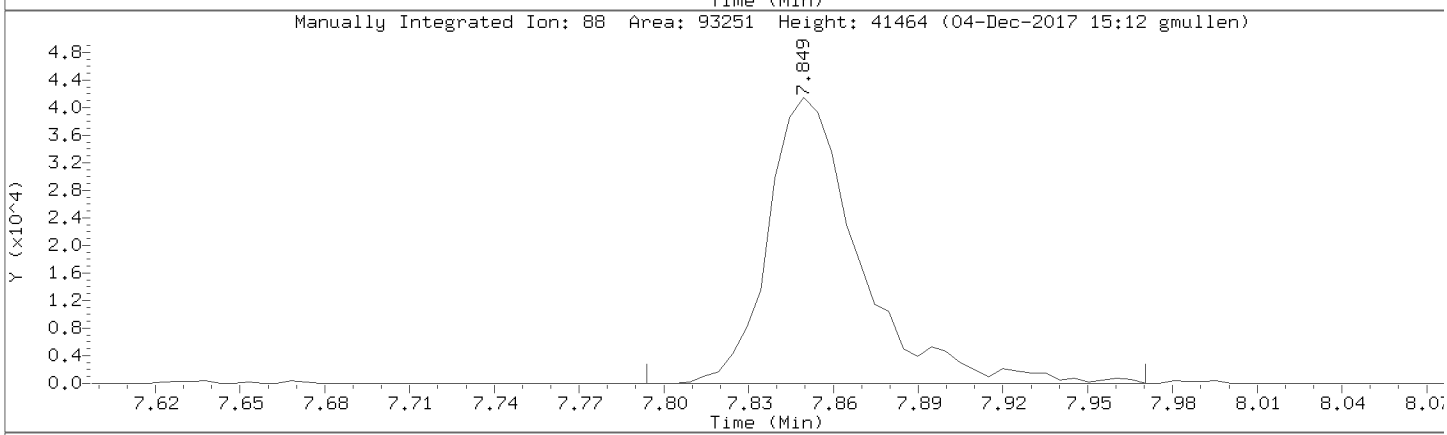
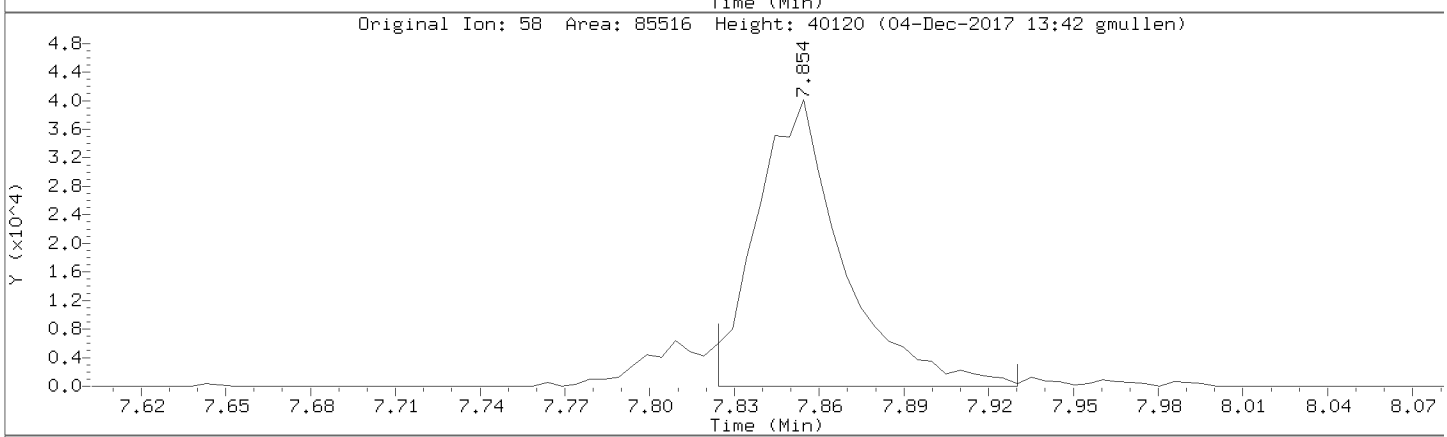
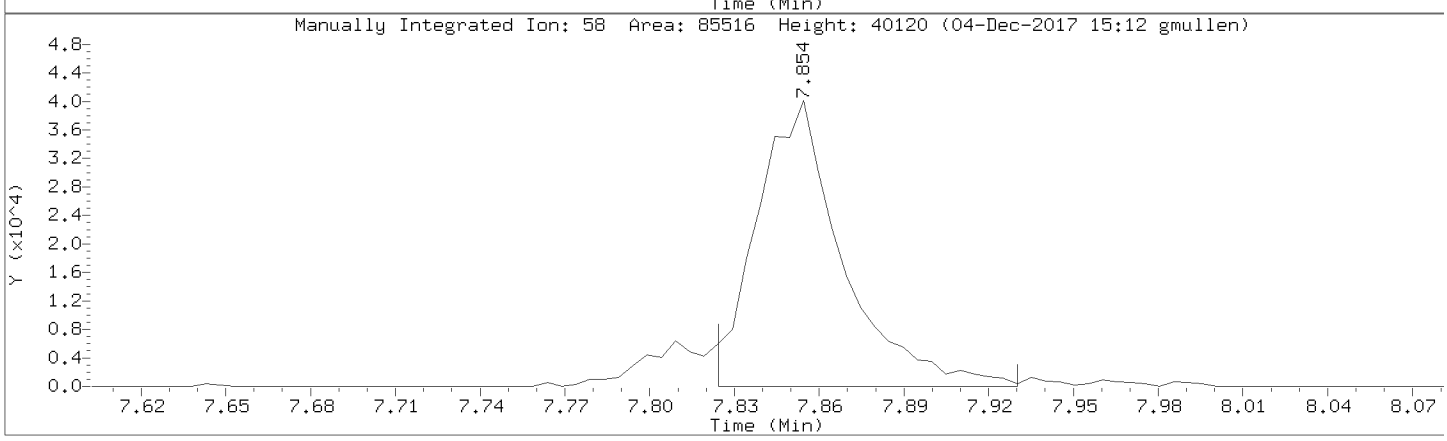
Injection Date: 04-DEC-2017 12:44
Instrument: 20msvd.i
Lab Sample ID: CAL6

Compound: 1,4-Dioxane (p-Dioxane) Review Code: LT
CAS Number:









Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\120417.b\1204d15.d
Lab Smp Id: CAL7 Client Smp ID: CAL7
Inj Date : 04-DEC-2017 13:02
Operator : GEM Inst ID: 20msvd.i
Smp Info : cal7,54933:1
Misc Info : 7846
Comment : SW846 8260
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Meth Date : 04-Dec-2017 15:46 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	1775484	200.000	204(A)
2 Chloromethane	50	1.899	1.894	(0.286)	2980101	200.000	203(A)
3 Vinyl chloride	62	1.995	1.990	(0.300)	2782562	200.000	201(A)
4 Bromomethane	94	2.333	2.338	(0.351)	1190582	200.000	220(A)
5 Chloroethane	64	2.454	2.484	(0.369)	825792	200.000	133(H)
6 Trichlorofluoromethane	101	2.615	2.640	(0.393)	2443474	200.000	218(A)
7 1,1-Dichloroethene	96	3.239	3.250	(0.487)	1446312	200.000	223(A)
8 Carbon disulfide	76	3.265	3.275	(0.491)	4515943	200.000	213(A)
9 1,1,2-Trichlorotrifluoroethane	101	3.315	3.325	(0.499)	1586730	200.000	216(A)
10 Iodomethane	142	3.426	3.431	(0.515)	2927921	200.000	212(A)
11 Acrolein	56	3.708	3.713	(0.558)	290611	200.000	210
12 Allyl chloride	41	3.894	3.894	(0.586)	3255091	200.000	217(A)
13 Methylene Chloride	84	4.045	4.046	(0.608)	1467639	200.000	219(A)
14 Acetone	43	4.151	4.151	(0.624)	380761	200.000	177
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.643)	1505130	200.000	212(A)
16 Methyl Acetate	74	4.328	4.323	(0.651)	155980	200.000	209(A)
17 n-Hexane	57	4.388	4.393	(0.660)	3114427	200.000	206(A)
18 Methyl-tert-butyl ether	73	4.454	4.449	(0.670)	3012800	200.000	218(A)
19 Acetonitrile	41	4.766	4.766	(0.717)	1881544	2000.00	2070(A)
20 Chloroprene	53	5.043	5.048	(0.758)	3241018	200.000	214(A)
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	3626067	200.000	220(A)
22 Acrylonitrile	53	5.149	5.154	(0.774)	583462	200.000	206(A)
23 Vinyl acetate	43	5.396	5.396	(0.811)	8392127	200.000	224(A)

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 cis-1,2-Dichloroethene	96	5.693	5.688	(0.856)	1726957	200.000	214(A)
	25 2,2-Dichloropropane	77	5.809	5.809	(0.873)	1764853	200.000	205(A)
	26 Cyclohexane	84	5.894	5.899	(0.886)	2075296	200.000	214(A)
	27 Bromochloromethane	128	5.899	5.899	(0.887)	808710	200.000	210(A)
	28 Chloroform	83	5.985	5.985	(0.900)	2783919	200.000	228(A)
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	2255746	200.000	231(A)
	30 Tetrahydrofuran	42	6.151	6.156	(0.925)	561054	200.000	206(A)
	31 1,1,1-Trichloroethane	97	6.192	6.192	(0.931)	2349181	200.000	216(A)
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	415057	50.0000	49.6
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	2039951	200.000	203(A)
	34 2-Butanone (MEK)	43	6.312	6.312	(0.949)	642552	200.000	189
	35 Benzene	78	6.559	6.559	(0.918)	5939139	200.000	213(A)
	36 Propionitrile	54	6.605	6.600	(0.993)	2147932	2000.00	2160(A)
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	10045818	2000.00	2160(A)
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	381086	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	2144391	200.000	208(A)
	40 Isobutanol	43	6.791	6.791	(1.021)	1285347	4200.00	4640(A)
	41 Methylcyclohexane	83	7.098	7.093	(0.994)	2309372	200.000	219(A)
	42 Trichloroethene	130	7.108	7.108	(0.995)	1833027	200.000	217(A)
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1238305	50.0000	
	44 Dibromomethane	93	7.491	7.496	(1.049)	902782	200.000	208(A)
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	2027586	200.000	214(A)
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	1975652	200.000	222(A)
	47 Methyl methacrylate	41	7.804	7.804	(1.092)	2964368	400.000	424(A)
	48 1,4-Dioxane (p-Dioxane)	88	7.854	7.849	(1.099)	186964	4000.00	4280(AM)
	49 2-Chloroethyl vinyl ether	63	8.227	8.222	(1.152)	2049753	400.000	432(A)
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	2353438	200.000	228(A)
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1363084	50.0000	49.2
	52 Toluene	91	8.544	8.539	(1.196)	6387356	200.000	219(A)
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	1618339	200.000	217(A)
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	1447088	200.000	206(A)
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	1956735	200.000	227(A)
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	1259633	200.000	218(A)
	57 1,1,2-Trichloroethane	97	9.073	9.068	(1.270)	1131048	200.000	210(A)
	58 Dibromochloromethane	129	9.219	9.214	(0.942)	1508326	200.000	206(A)
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	1815016	200.000	210(A)
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	1182119	200.000	209(A)
	61 2-Hexanone	43	9.577	9.577	(0.978)	983680	200.000	203(A)
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	563536	50.0000	
	63 Chlorobenzene	112	9.799	9.799	(1.001)	4335211	200.000	222(A)
	64 Ethylbenzene	91	9.814	9.814	(1.003)	6989213	200.000	212(A)
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	1605248	200.000	228(A)
	66 m&p-Xylene	106	9.914	9.914	(1.013)	5552725	400.000	436(A)
	67 o-Xylene	106	10.207	10.207	(1.043)	2560663	200.000	217(A)
	68 Styrene	104	10.242	10.242	(1.046)	4127580	200.000	215(A)
	69 Bromoform	173	10.262	10.267	(1.048)	1087441	200.000	202(A)
	70 Isopropylbenzene (Cumene)	105	10.408	10.403	(0.926)	6621931	200.000	216(A)
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	570465	50.0000	49.7
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	837796	400.000	395
	73 Bromobenzene	156	10.655	10.655	(0.948)	1932217	200.000	223(A)
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	7677678	200.000	217(A)
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	1287932	200.000	204(A)
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	4681767	200.000	217(A)
	77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	4930652	200.000	220(A)

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	351918	200.000	212(A)
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	4249840	200.000	215(A)
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	2681290	200.000	221(A)
81 Pentachloroethane	167	10.982	10.982	(0.978)	1201026	200.000	236(A)
82 1,2,4-Trimethylbenzene	105	10.997	10.998	(0.979)	4787955	200.000	217(A)
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	6168975	200.000	219(A)
84 p-Isopropyltoluene	119	11.134	11.134	(0.991)	5042426	200.000	221(A)
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	3052846	200.000	222(A)
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	581349	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	3069469	200.000	219(A)
88 n-Butylbenzene	91	11.365	11.365	(1.012)	4457125	200.000	220(A)
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	2611888	200.000	216(A)
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	407827	200.000	203(A)
91 Hexachloro-1,3-butadiene	225	12.287	12.282	(1.094)	808200	200.000	223(A)
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	1347849	200.000	207(A)
93 Naphthalene	128	12.544	12.544	(1.117)	2444903	200.000	233(A)
94 1,2,3-Trichlorobenzene	180	12.670	12.670	(1.128)	992892	200.000	225(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d15.d

Page 4

Date : 04-DEC-2017 13:02

Client ID: CAL7

Instrument: 20msvd.i

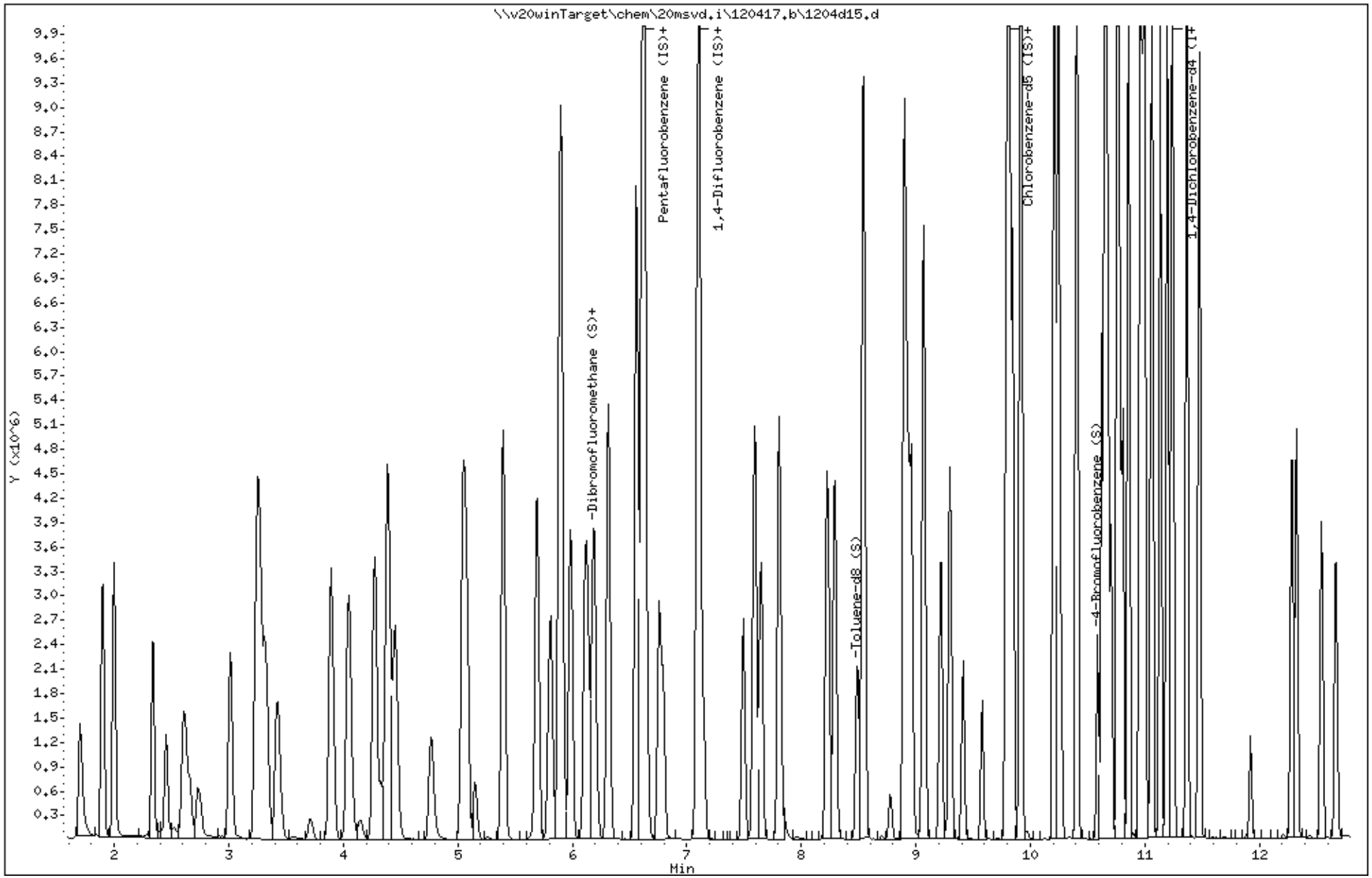
Sample Info: CAL7,54933:1

Purge Volume: 5.0

Operator: GEM

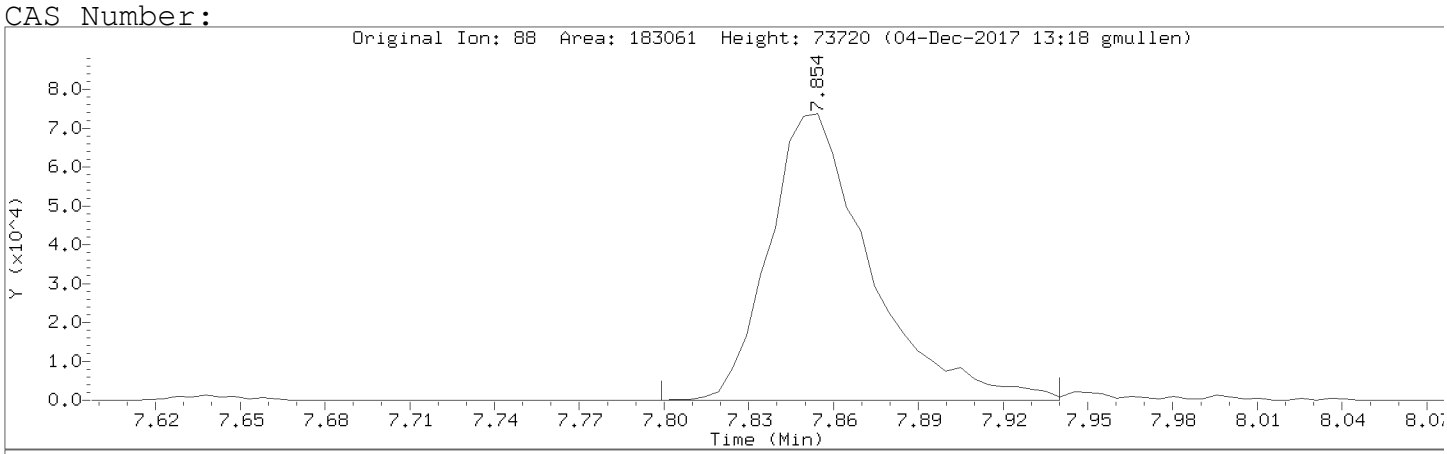
Column phase: RTX VMS 30m

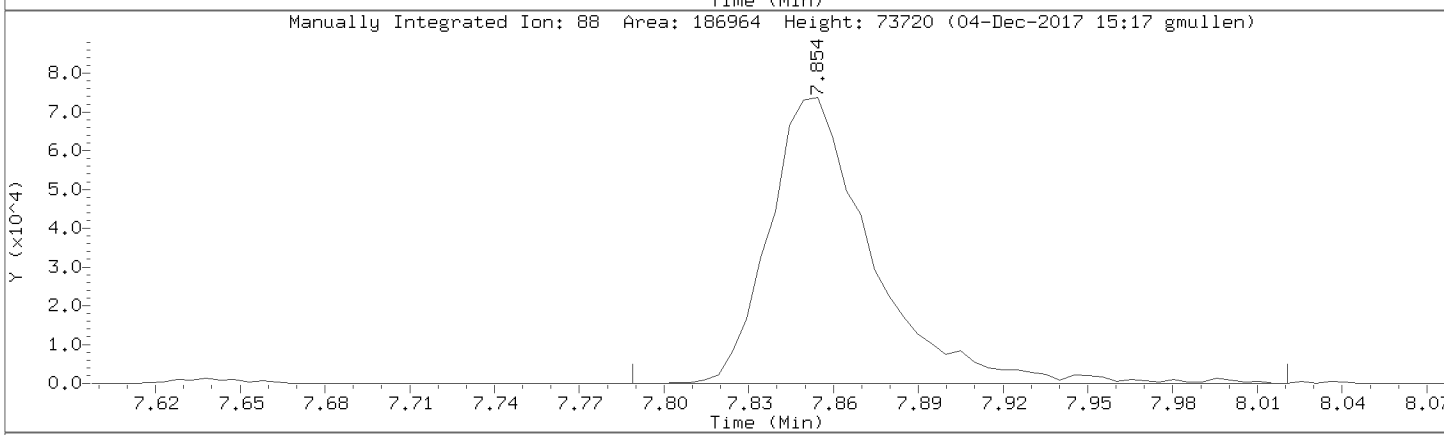
Column diameter: 0.25

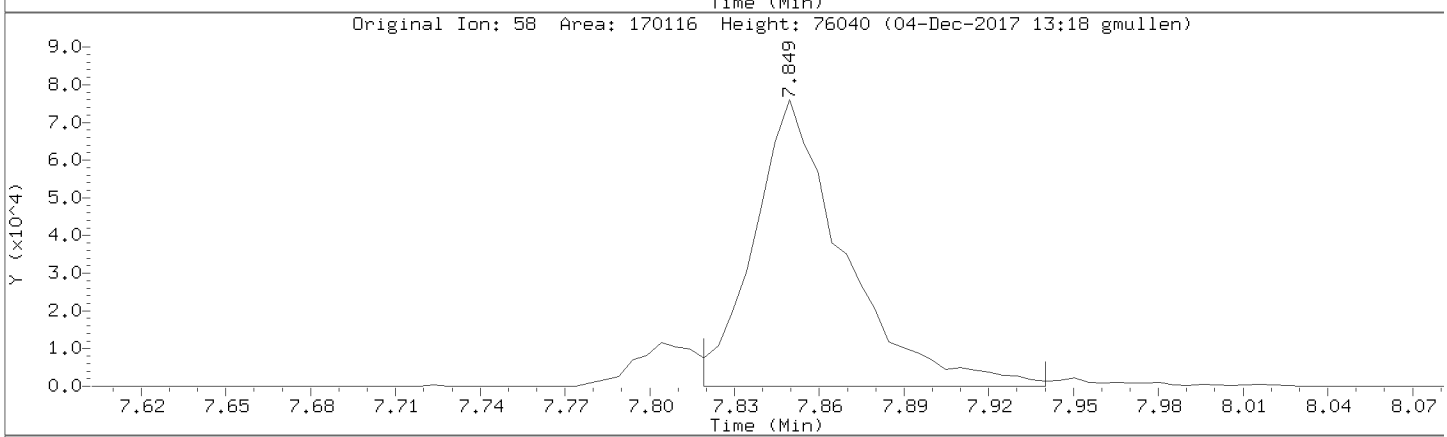


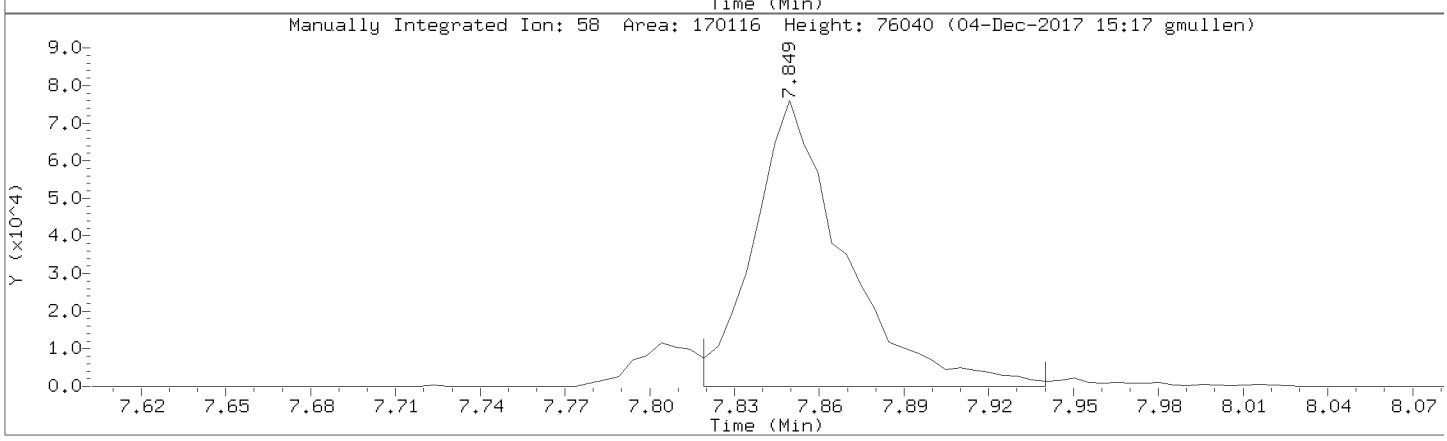
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\120417.b/1204d15.d
Injection Date: 04-DEC-2017 13:02
Instrument: 20msvd.i
Lab Sample ID: CAL7

Compound: 1,4-Dioxane (p-Dioxane) Review Code: LT
CAS Number:









SAMPLE NO.

3563539ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 11/17/2017 Time: 12:39

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 11/17/2017 11/17/2017

Lab File ID: 111717HA.B\1117D13.D
Init. Calib. Time(s): 09:29 11:16

SDG No.: 2066645

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Enflurane	Averaged	0.91641	0.92023	0.1000	0.4167	40.0000
Haloether 229	Averaged	0.79317	0.80442	0.1000	1.4192	40.0000
Haloether 406	Averaged	1.35621	1.37719	0.1000	1.5465	40.0000
Haloether 421	Averaged	0.59721	0.60478	0.1000	1.2664	40.0000
Haloether 427	Averaged	0.42130	0.43471	0.1000	3.1833	40.0000
Haloether 428	Averaged	0.44973	0.45747	0.1000	1.7217	40.0000
Haloether 508	Averaged	0.41286	0.39621	0.1000	-4.0312	40.0000
Haloether 528	Averaged	0.75900	0.78830	0.1000	3.8603	40.0000
Halomar	Averaged	2.00711	1.99903	0.1000	-0.4026	40.0000
Isoflurane	Averaged	0.44764	0.44380	0.1000	-0.8563	40.0000
Methoxyflurane	Averaged	0.89401	0.91422	0.1000	2.2606	40.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

3563676ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 11/17/2017 Time: 13:24

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 11/17/2017 11/17/2017

Lab File ID: 111717.B\1117D15.D
Init. Calib. Time(s): 09:11 11:16

SDG No.: 2066645

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Linear	50	98.83600	0.1000	97.6720	30.0000
Acrolein	Linear	50	47.78406	0.0500	-4.4319	30.0000
Acrylonitrile	Averaged	0.28850	0.27787	0.1000	-3.6865	30.0000
Benzene	Averaged	1.16747	1.11335	0.1000	-4.6355	30.0000
Bromodichloromethane	Averaged	0.39688	0.40428	0.1000	1.8646	30.0000
Bromoform	Averaged	0.38727	0.41129	0.1000	6.2025	30.0000
Bromomethane	Averaged	0.90179	0.79368	0.1000	-11.9892	30.0000
2-Butanone (MEK)	Averaged	0.33192	0.50410	0.1000	51.8735	30.0000
Carbon disulfide	Averaged	2.63357	2.62136	0.1000	-0.4635	30.0000
Carbon tetrachloride	Averaged	0.41751	0.44790	0.1000	7.2781	30.0000
Chlorobenzene	Averaged	1.65278	1.75707	0.3000	6.3100	30.0000
Chloroethane	Averaged	0.97764	0.91007	0.1000	-6.9114	30.0000
Chloroform	Averaged	1.66340	1.64021	0.1000	-1.3944	20.0000
Chloromethane	Averaged	1.34180	1.35832	0.1000	1.2311	30.0000
Dibromochloromethane	Averaged	0.57279	0.60452	0.1000	5.5405	30.0000
Dibromomethane	Averaged	0.18122	0.18294	0.1000	0.9487	30.0000
1,1-Dichloroethane	Averaged	1.94042	2.00641	0.1000	3.4008	30.0000
1,2-Dichloroethane	Averaged	0.42226	0.42611	0.1000	0.9105	30.0000
1,1-Dichloroethene	Averaged	0.83512	0.83088	0.1000	-0.5071	20.0000
cis-1,2-Dichloroethene	Averaged	0.98110	0.97095	0.1000	-1.0347	30.0000
trans-1,2-Dichloroethene	Averaged	0.88383	0.89455	0.1000	1.2126	30.0000
1,2-Dichloropropane	Averaged	0.35887	0.35758	0.1000	-0.3586	20.0000
cis-1,3-Dichloropropene	Averaged	0.46815	0.47601	0.1000	1.6798	30.0000
trans-1,3-Dichloropropene	Averaged	0.38489	0.39353	0.1000	2.2449	30.0000
Ethylbenzene	Averaged	2.82567	2.89272	0.1000	2.3731	20.0000
2-Hexanone	Averaged	0.36433	0.47051	0.1000	29.1432	30.0000
Methylene Chloride	Linear	50	49.41518	0.1000	-1.1696	30.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.50391	0.53109	0.1000	5.3929	30.0000
Styrene	Averaged	1.61722	1.66246	0.1000	2.7977	30.0000
1,1,2,2-Tetrachloroethane	Averaged	0.60445	0.56746	0.3000	-6.1187	30.0000
Tetrachloroethene	Averaged	0.59475	0.65622	0.1000	10.3360	30.0000
Toluene	Averaged	1.22854	1.19198	0.1000	-2.9765	20.0000
1,1,1-Trichloroethane	Averaged	1.42088	1.43182	0.1000	0.7698	30.0000
1,1,2-Trichloroethane	Averaged	0.20958	0.21232	0.1000	1.3112	30.0000
Trichloroethene	Averaged	0.31605	0.33435	0.1000	5.7911	30.0000
Trichlorofluoromethane	Averaged	1.80215	2.01572	0.1000	11.8507	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

3563676ICV

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 11/17/2017 Time: 13:24

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 11/17/2017 11/17/2017

Lab File ID: 111717.B\1117D15.D
Init. Calib. Time(s): 09:11 11:16

SDG No.: 2066645

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,3-Trichloropropane	Averaged	0.15351	0.15501	0.1000	0.9755	30.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.92371	0.94363	0.1000	2.1566	30.0000
Vinyl chloride	Averaged	1.88915	1.78887	0.1000	-5.3085	20.0000
m&p-Xylene	Averaged	1.08034	1.08069	0.1000	0.0323	30.0000
o-Xylene	Averaged	0.98882	0.99512	0.1000	0.6373	30.0000
4-Bromofluorobenzene (S)	Averaged	0.97934	0.98096	0.1000	0.1659	30.0000
Dibromofluoromethane (S)	Averaged	1.03926	1.04612	0.1000	0.6609	30.0000
Toluene-d8 (S)	Averaged	1.14700	1.14363	0.1000	-0.2943	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

3594009ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 12/04/2017 Time: 15:32

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 12/04/2017 12/04/2017

Lab File ID: 120417.B\1204D20.D
Init. Calib. Time(s): 10:58 14:54

SDG No.: 2066645

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Linear	50	48.13679	0.1000	-3.7264	30.0000
Acrolein	Averaged	0.18394	0.17787	0.0500	-3.3003	30.0000
Acrylonitrile	Averaged	0.37611	0.34484	0.1000	-8.3149	30.0000
Benzene	Averaged	1.13368	1.06930	0.1000	-5.6792	30.0000
Bromodichloromethane	Averaged	0.36218	0.35950	0.1000	-0.7409	30.0000
Bromoform	Linear	50	47.6146	0.1000	-4.7708	30.0000
Bromomethane	Linear	50	49.98284	0.1000	-0.0343	30.0000
2-Butanone (MEK)	Averaged	0.44477	0.40353	0.1000	-9.2730	30.0000
Carbon disulfide	Averaged	2.83611	2.62953	0.1000	-7.2839	30.0000
Carbon tetrachloride	Averaged	0.39592	0.41235	0.1000	4.1515	30.0000
Chlorobenzene	Averaged	1.74398	1.77900	0.3000	2.0080	30.0000
Chloroethane	Averaged	0.81699	0.70983	0.1000	-13.1167	30.0000
Chloroform	Averaged	1.62664	1.59318	0.1000	-2.0570	20.0000
Chloromethane	Averaged	1.95056	1.80521	0.1000	-7.4517	30.0000
Dibromochloromethane	Linear	50	45.56738	0.1000	-8.8652	30.0000
Dibromomethane	Averaged	0.17694	0.16763	0.1000	-5.2644	30.0000
1,1-Dichloroethane	Averaged	2.19327	2.14799	0.1000	-2.0648	30.0000
1,2-Dichloroethane	Averaged	0.41990	0.38469	0.1000	-8.3859	30.0000
1,1-Dichloroethene	Averaged	0.86144	0.84061	0.1000	-2.4171	20.0000
cis-1,2-Dichloroethene	Averaged	1.07587	0.99615	0.1000	-7.4101	30.0000
trans-1,2-Dichloroethene	Averaged	0.94121	0.91960	0.1000	-2.2965	30.0000
1,2-Dichloropropane	Averaged	0.38563	0.36545	0.1000	-5.2332	20.0000
cis-1,3-Dichloropropene	Averaged	0.41862	0.42249	0.1000	0.9249	30.0000
trans-1,3-Dichloropropene	Averaged	0.34937	0.35607	0.1000	1.9165	30.0000
Ethylbenzene	Averaged	2.94035	2.81529	0.1000	-4.2532	20.0000
2-Hexanone	Averaged	0.42762	0.42677	0.1000	-0.1977	30.0000
Methylene Chloride	Linear	50	46.88666	0.1000	-6.2267	30.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.62097	0.64350	0.1000	3.6271	30.0000
Styrene	Averaged	1.71058	1.73433	0.1000	1.3884	30.0000
1,1,2,2-Tetrachloroethane	Linear	50	47.80839	0.3000	-4.3832	30.0000
Tetrachloroethene	Averaged	0.66311	0.70363	0.1000	6.1107	30.0000
Toluene	Averaged	1.18564	1.14668	0.1000	-3.2864	20.0000
1,1,1-Trichloroethane	Averaged	1.44321	1.39542	0.1000	-3.3117	30.0000
1,1,2-Trichloroethane	Averaged	0.21858	0.20483	0.1000	-6.2910	30.0000
Trichloroethene	Averaged	0.34410	0.32352	0.1000	-5.9807	30.0000
Trichlorofluoromethane	Averaged	1.48473	1.48501	0.1000	0.0188	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

3594009ICV

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 12/04/2017 Time: 15:32

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 12/04/2017 12/04/2017

Lab File ID: 120417.B\1204D20.D
Init. Calib. Time(s): 10:58 14:54

SDG No.: 2066645

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,3-Trichloropropane	Averaged	0.14377	0.14235	0.1000	-0.9861	30.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.97593	0.95384	0.1000	-2.2634	30.0000
Vinyl chloride	Averaged	1.84279	1.56859	0.1000	-14.8795	20.0000
m&p-Xylene	Averaged	1.13374	1.07356	0.1000	-5.3084	30.0000
o-Xylene	Averaged	1.05077	1.04603	0.1000	-0.4506	30.0000
4-Bromofluorobenzene (S)	Averaged	0.98876	0.95802	0.1000	-3.1097	30.0000
Dibromofluoromethane (S)	Averaged	1.10076	1.07253	0.1000	-2.5642	30.0000
Toluene-d8 (S)	Averaged	1.11873	1.09330	0.1000	-2.2733	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

3612660CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 12/12/2017 Time: 09:40

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 12/04/2017 12/04/2017

Lab File ID: 121217.B\1212D04.D
Init. Calib. Time(s): 10:58 14:54

SDG No.: 2066645

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Linear	50	59.31603	0.1000	18.6321	30.0000
Acrolein	Averaged	0.18394	0.15007	0.0500	-18.4177	30.0000
Acrylonitrile	Averaged	0.37611	0.35364	0.1000	-5.9746	30.0000
Benzene	Averaged	1.13368	1.12941	0.1000	-0.3764	30.0000
Bromodichloromethane	Averaged	0.36218	0.35348	0.1000	-2.4014	30.0000
Bromoform	Linear	50	45.79908	0.1000	-8.4018	30.0000
Bromomethane	Linear	50	48.86174	0.1000	-2.2765	30.0000
2-Butanone (MEK)	Averaged	0.44477	0.43865	0.1000	-1.3763	30.0000
Carbon disulfide	Averaged	2.83611	2.65768	0.1000	-6.2915	30.0000
Carbon tetrachloride	Averaged	0.39592	0.41204	0.1000	4.0719	30.0000
Chlorobenzene	Averaged	1.74398	1.80780	0.3000	3.6598	30.0000
Chloroethane	Averaged	0.81699	0.78145	0.1000	-4.3494	30.0000
Chloroform	Averaged	1.62664	1.66403	0.1000	2.2982	20.0000
Chloromethane	Averaged	1.95056	1.83978	0.1000	-5.6795	30.0000
Dibromochloromethane	Linear	50	47.64275	0.1000	-4.7145	30.0000
Dibromomethane	Averaged	0.17694	0.16880	0.1000	-4.6033	30.0000
1,1-Dichloroethane	Averaged	2.19327	2.24984	0.1000	2.5789	30.0000
1,2-Dichloroethane	Averaged	0.41990	0.40749	0.1000	-2.9563	30.0000
1,1-Dichloroethene	Averaged	0.86144	0.85323	0.1000	-0.9524	20.0000
cis-1,2-Dichloroethene	Averaged	1.07587	1.02531	0.1000	-4.6995	30.0000
trans-1,2-Dichloroethene	Averaged	0.94121	0.92960	0.1000	-1.2333	30.0000
1,2-Dichloropropane	Averaged	0.38563	0.38534	0.1000	-0.0752	20.0000
cis-1,3-Dichloropropene	Averaged	0.41862	0.42513	0.1000	1.5552	30.0000
trans-1,3-Dichloropropene	Averaged	0.34937	0.35009	0.1000	0.2066	30.0000
Ethylbenzene	Averaged	2.94035	3.06083	0.1000	4.0974	20.0000
2-Hexanone	Averaged	0.42762	0.44632	0.1000	4.3735	30.0000
Methylene Chloride	Linear	50	46.37752	0.1000	-7.2450	30.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.62097	0.64371	0.1000	3.6616	30.0000
Styrene	Averaged	1.71058	1.77155	0.1000	3.5644	30.0000
1,1,2,2-Tetrachloroethane	Linear	50	53.71882	0.3000	7.4376	30.0000
Tetrachloroethene	Averaged	0.66311	0.73167	0.1000	10.3397	30.0000
Toluene	Averaged	1.18564	1.18709	0.1000	0.1219	20.0000
1,1,1-Trichloroethane	Averaged	1.44321	1.46258	0.1000	1.3417	30.0000
1,1,2-Trichloroethane	Averaged	0.21858	0.21204	0.1000	-2.9956	30.0000
Trichloroethene	Averaged	0.34410	0.35031	0.1000	1.8034	30.0000
Trichlorofluoromethane	Averaged	1.48473	1.39754	0.1000	-5.8721	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

3612660CCV

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 12/12/2017 Time: 09:40

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 12/04/2017 12/04/2017

Lab File ID: 121217.B\1212D04.D
Init. Calib. Time(s): 10:58 14:54

SDG No.: 2066645

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,2,3-Trichloropropane	Averaged	0.14377	0.15550	0.1000	8.1551	30.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.97593	0.97028	0.1000	-0.5783	30.0000
Vinyl chloride	Averaged	1.84279	1.65439	0.1000	-10.2237	20.0000
m&p-Xylene	Averaged	1.13374	1.19695	0.1000	5.5753	30.0000
o-Xylene	Averaged	1.05077	1.10054	0.1000	4.7374	30.0000
4-Bromofluorobenzene (S)	Averaged	0.98876	1.02924	0.1000	4.0930	30.0000
Dibromofluoromethane (S)	Averaged	1.10076	1.09064	0.1000	-0.9190	30.0000
Toluene-d8 (S)	Averaged	1.11873	1.07470	0.1000	-3.9356	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

3612665CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New Orleans
Calibration Date: 12/12/2017 Time: 09:40

Instrument ID: 20MSVD GC Column: Col 1
Init. Calib. Date(s): 11/17/2017 11/17/2017

Lab File ID: 121217HA.B\1212D04.D
Init. Calib. Time(s): 09:29 11:16

SDG No.: 2066645

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Enflurane	Averaged	0.91641	0.99316	0.1000	8.3753	40.0000
Haloether 229	Averaged	0.79317	0.68829	0.1000	-13.2229	40.0000
Haloether 406	Averaged	1.35621	1.41668	0.1000	4.4588	40.0000
Haloether 421	Averaged	0.59721	0.57684	0.1000	-3.4116	40.0000
Haloether 427	Averaged	0.42130	0.45312	0.1000	7.5531	40.0000
Haloether 428	Averaged	0.44973	0.44968	0.1000	-0.0111	40.0000
Haloether 508	Averaged	0.41286	0.42189	0.1000	2.1882	40.0000
Haloether 528	Averaged	0.75900	0.76508	0.1000	0.8009	40.0000
Halomar	Averaged	2.00711	2.01874	0.1000	0.5796	40.0000
Isoflurane	Averaged	0.44764	0.49089	0.1000	9.6637	40.0000
Methoxyflurane	Averaged	0.89401	0.83127	0.1000	-7.0177	40.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

SW846 8260

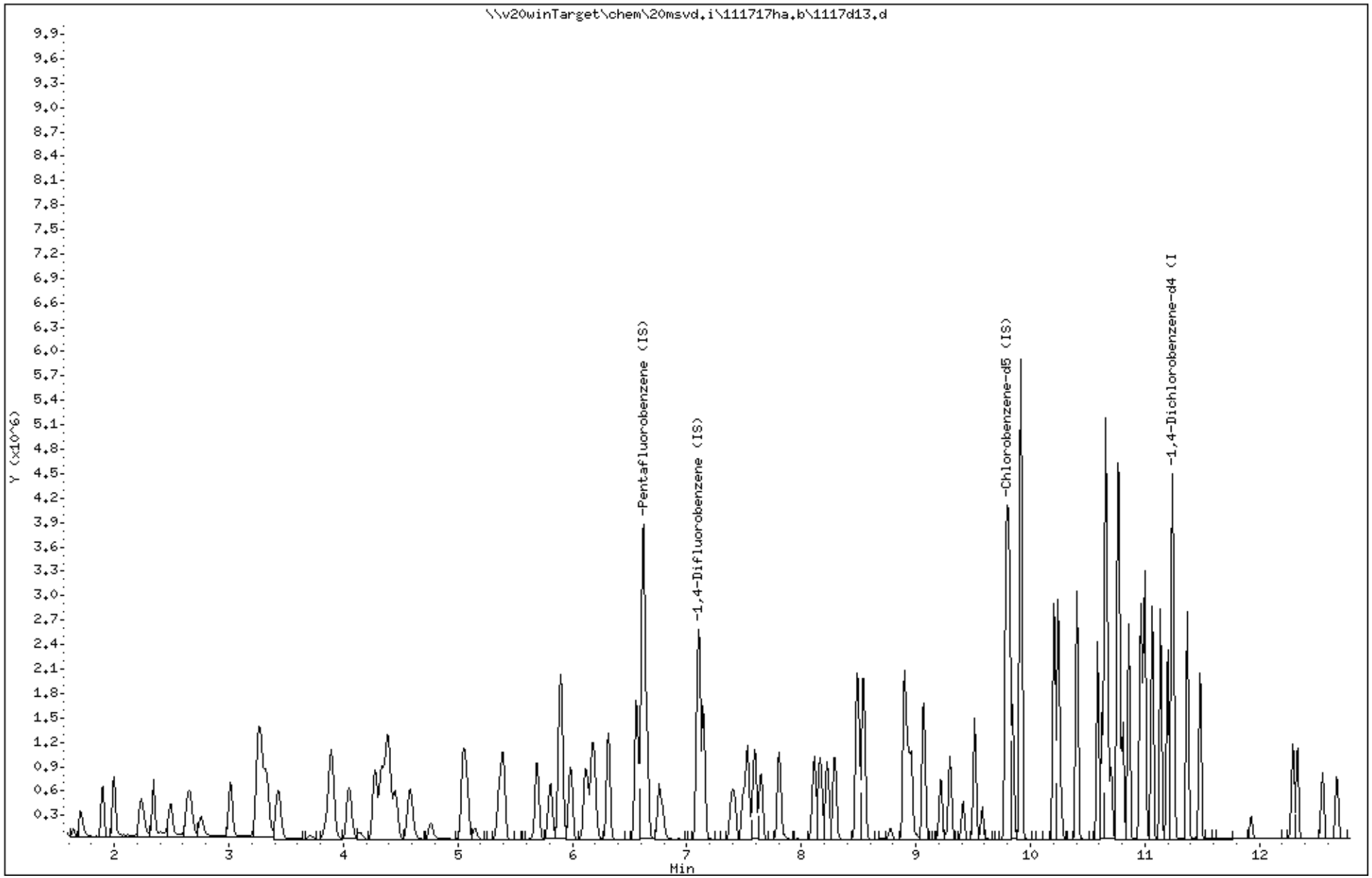
Data file : \\v20winTarget\chem\20msvd.i\111717ha.b\1117d13.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 17-NOV-2017 12:39
Operator : GEM Inst ID: 20msvd.i
Smp Info : icv,54443:1
Misc Info : 7782
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717ha.b\d111717halo.m
Meth Date : 17-Nov-2017 14:22 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.237	2.237	(0.336)	309202	50.0000	50.7
2 Haloether 406	85	3.879	3.879	(0.583)	529360	50.0000	50.8
3 Isoflurane	117	4.332	4.332	(0.652)	170588	50.0000	49.6
4 Haloether 508	97	4.357	4.357	(0.655)	152296	50.0000	48.0
5 Enflurane	117	4.584	4.584	(0.689)	353716	50.0000	50.2
6 Halomar	81	5.360	5.360	(0.806)	768384	50.0000	49.8
* 9 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	384378	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.143	7.143	(1.000)	1140726	50.0000	
7 Haloether 421	67	7.405	7.405	(1.037)	689885	50.0000	50.6
8 Haloether 427	151	7.526	7.526	(1.054)	495881	50.0000	51.6
11 Haloether 428	117	8.111	8.111	(1.135)	521849	50.0000	50.9
12 Methoxyflurane	81	8.161	8.161	(1.142)	1042874	50.0000	51.1
13 Haloether 528	211	9.516	9.516	(1.332)	899234	50.0000	51.9
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	544470	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.239	11.239	(1.000)	492661	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\111717ha.b\1117d13.d
Date : 17-NOV-2017 12:39
Client ID: ICV
Instrument: 20msvd.i
Sample Info: ICV,54443:1
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\111717ha.b/1117d13.d
Injection Date: 17-NOV-2017 12:39
Instrument: 20msvd.i
Lab Sample ID: ICV
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\111717.b\1117d15.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 17-NOV-2017 13:24
Operator : GEM Inst ID: 20msvd.i
Smp Info : icv,54405:1
Misc Info : 7777
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\111717.b\d111717sim.m
Meth Date : 17-Nov-2017 13:40 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:05 Cal File: 1117d07.d
Als bottle: 15 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	373525	50.0000	50.9
2 Chloromethane	50	1.894	1.894	(0.285)	517391	50.0000	50.6
3 Vinyl chloride	62	1.990	1.990	(0.299)	681390	50.0000	47.3
4 Bromomethane	94	2.338	2.338	(0.352)	302316	50.0000	44.0
5 Chloroethane	64	2.489	2.489	(0.374)	346651	50.0000	46.5
6 Trichlorofluoromethane	101	2.650	2.650	(0.399)	767799	50.0000	55.9
7 1,1-Dichloroethene	96	3.244	3.244	(0.488)	316489	50.0000	49.7
8 Carbon disulfide	76	3.275	3.275	(0.492)	998491	50.0000	49.8
9 1,1,2-Trichlorotrifluoroethane	101	3.315	3.315	(0.499)	359434	50.0000	51.1
10 Iodomethane	142	3.426	3.426	(0.515)	640740	50.0000	52.4
11 Acrolein	56	3.718	3.718	(0.559)	52347	50.0000	47.8
12 Allyl chloride	41	3.894	3.894	(0.586)	629136	50.0000	50.6
13 Methylene Chloride	84	4.051	4.051	(0.609)	326500	50.0000	49.4
14 Acetone	43	4.146	4.146	(0.624)	144272	50.0000	98.8
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.643)	340739	50.0000	50.6
16 Methyl Acetate	74	4.318	4.318	(0.649)	35271	50.0000	50.4(M)
17 n-Hexane	57	4.388	4.388	(0.660)	632103	50.0000	50.6(M)
18 Methyl-tert-butyl ether	73	4.449	4.449	(0.669)	698670	50.0000	50.0
19 Acetonitrile	41	4.766	4.766	(0.717)	303782	500.000	503
20 Chloroprene	53	5.048	5.048	(0.759)	700613	50.0000	54.2
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	764254	50.0000	51.7
22 Acrylonitrile	53	5.144	5.144	(0.773)	105841	50.0000	48.2

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.396	5.396	(0.811)	1525272	50.0000	49.8
	24 cis-1,2-Dichloroethene	96	5.688	5.688	(0.855)	369839	50.0000	49.5
	25 2,2-Dichloropropane	77	5.804	5.804	(0.873)	419327	50.0000	49.1
	26 Cyclohexane	84	5.889	5.889	(0.886)	486784	50.0000	52.3
	27 Bromochloromethane	128	5.894	5.894	(0.886)	174604	50.0000	52.4
	28 Chloroform	83	5.985	5.985	(0.900)	624764	50.0000	49.3
	29 Carbon tetrachloride	117	6.111	6.111	(0.855)	502606	50.0000	53.6
	30 Tetrahydrofuran	42	6.151	6.151	(0.925)	106234	50.0000	51.2
	31 1,1,1-Trichloroethane	97	6.187	6.187	(0.930)	545388	50.0000	50.4
$	32 Dibromofluoromethane (S)	113	6.166	6.166	(0.927)	398475	50.0000	50.3
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	482627	50.0000	49.1
	34 2-Butanone (MEK)	43	6.312	6.312	(0.949)	192015	50.0000	75.9
	35 Benzene	78	6.559	6.559	(0.918)	1249351	50.0000	47.7
	36 Propionitrile	54	6.600	6.600	(0.992)	385617	500.000	506
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	1801311	500.000	499
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	380906	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	478158	50.0000	50.4
	40 Isobutanol	43	6.786	6.786	(1.020)	219672	1050.00	1030
	41 Methylcyclohexane	83	7.098	7.098	(0.994)	535152	50.0000	51.8
	42 Trichloroethene	130	7.108	7.108	(0.995)	375193	50.0000	52.9
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1122151	50.0000	
	44 Dibromomethane	93	7.491	7.491	(1.049)	205288	50.0000	50.5
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	401264	50.0000	49.8
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	453659	50.0000	50.9
	47 Methyl methacrylate	41	7.809	7.809	(1.093)	573647	100.000	102
	48 1,4-Dioxane (p-Dioxane)	88	7.844	7.844	(1.098)	35819	1000.00	1100
	49 2-Chloroethyl vinyl ether	63	8.227	8.227	(1.152)	429191	100.000	103
	50 cis-1,3-Dichloropropene	75	8.287	8.287	(1.160)	534155	50.0000	50.8
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1283323	50.0000	49.8
	52 Toluene	91	8.539	8.539	(1.195)	1337578	50.0000	48.5
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	340579	50.0000	55.2
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	275635	50.0000	52.7
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	441599	50.0000	51.1
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	296467	50.0000	52.9
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	238259	50.0000	50.6
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	313747	50.0000	52.8
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	400878	50.0000	51.4
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	241248	50.0000	47.5
	61 2-Hexanone	43	9.577	9.577	(0.978)	244196	50.0000	64.6
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	518999	50.0000	
	63 Chlorobenzene	112	9.799	9.799	(1.001)	911916	50.0000	53.2
	64 Ethylbenzene	91	9.814	9.814	(1.003)	1501321	50.0000	51.2
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	329357	50.0000	51.2
	66 m&p-Xylene	106	9.914	9.914	(1.013)	1121757	100.000	100
	67 o-Xylene	106	10.207	10.207	(1.043)	516468	50.0000	50.3
	68 Styrene	104	10.242	10.242	(1.046)	862816	50.0000	51.4
	69 Bromoform	173	10.267	10.267	(1.049)	213461	50.0000	53.1
	70 Isopropylbenzene (Cumene)	105	10.408	10.408	(0.926)	1339219	50.0000	47.6
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	480503	50.0000	50.1
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	222554	100.000	106
	73 Bromobenzene	156	10.655	10.655	(0.948)	389334	50.0000	50.4
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	1574823	50.0000	46.6
	75 1,1,2,2-Tetrachloroethane	83	10.705	10.705	(0.953)	277960	50.0000	46.9
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	1040248	50.0000	49.2

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	1044324	50.0000	48.4
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	75929	50.0000	50.5
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	944740	50.0000	49.1
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	566127	50.0000	46.4
81 Pentachloroethane	167	10.982	10.982	(0.978)	235195	50.0000	50.1
82 1,2,4-Trimethylbenzene	105	10.998	10.998	(0.979)	1028466	50.0000	49.4
83 sec-Butylbenzene	105	11.063	11.063	(0.985)	1204850	50.0000	46.7
84 p-Isopropyltoluene	119	11.134	11.134	(0.991)	979457	50.0000	47.1
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	597587	50.0000	50.5
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	489828	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	591351	50.0000	49.1
88 n-Butylbenzene	91	11.370	11.370	(1.012)	908620	50.0000	46.2
89 1,2-Dichlorobenzene	146	11.481	11.481	(1.022)	516274	50.0000	49.7
90 1,2-Dibromo-3-chloropropane	157	11.927	11.927	(1.062)	76519	50.0000	51.9
91 Hexachloro-1,3-butadiene	225	12.287	12.287	(1.094)	163515	50.0000	50.7
92 1,2,4-Trichlorobenzene	180	12.327	12.327	(1.097)	254314	50.0000	50.2
93 Naphthalene	128	12.549	12.549	(1.117)	486039	50.0000	48.7
94 1,2,3-Trichlorobenzene	180	12.675	12.675	(1.128)	185831	50.0000	49.3

QC Flag Legend

M - Compound response manually integrated.

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Operator: GEM
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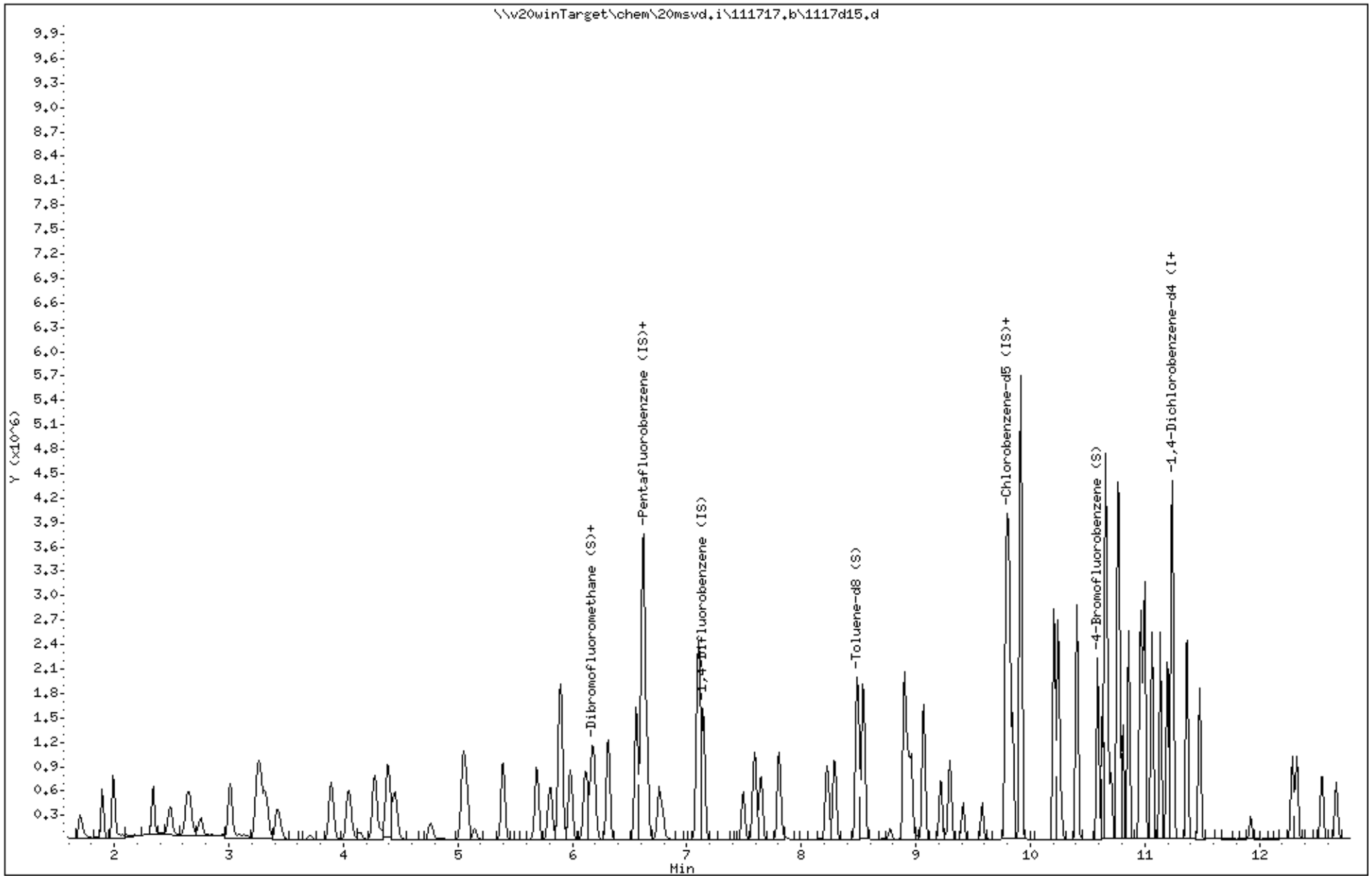

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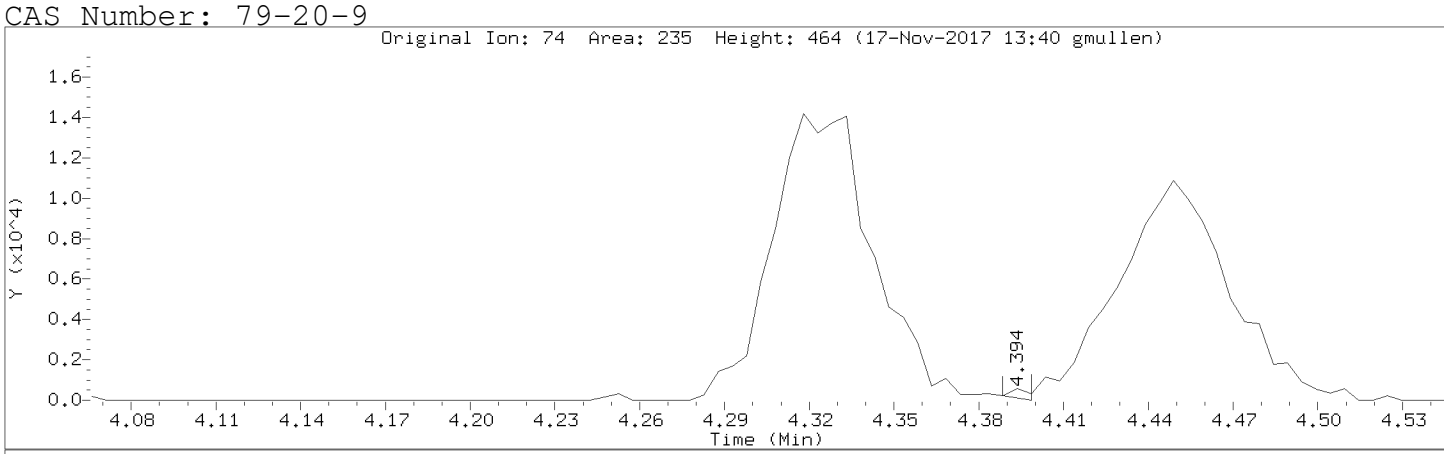
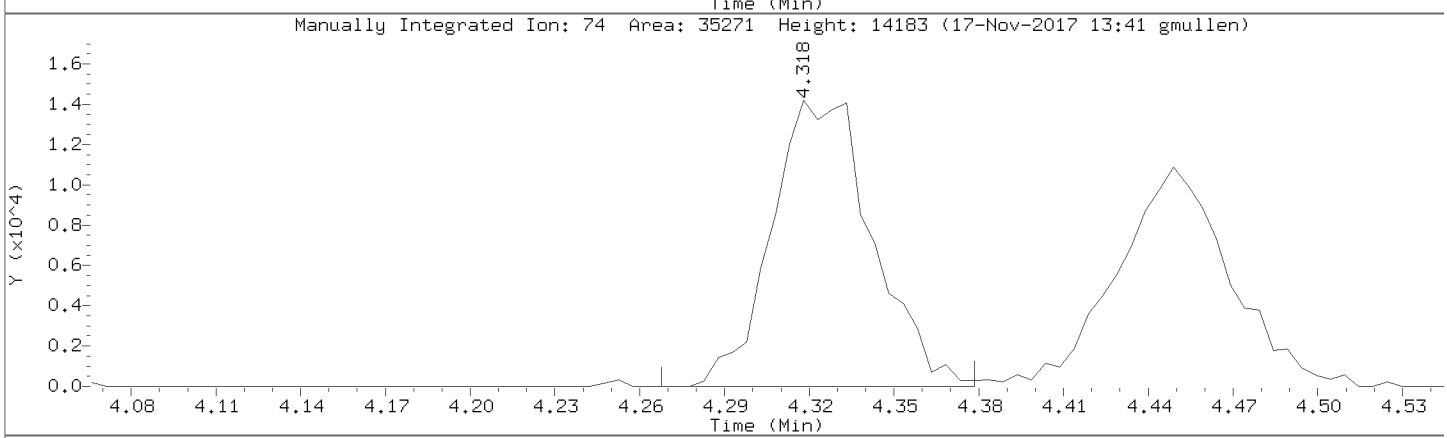
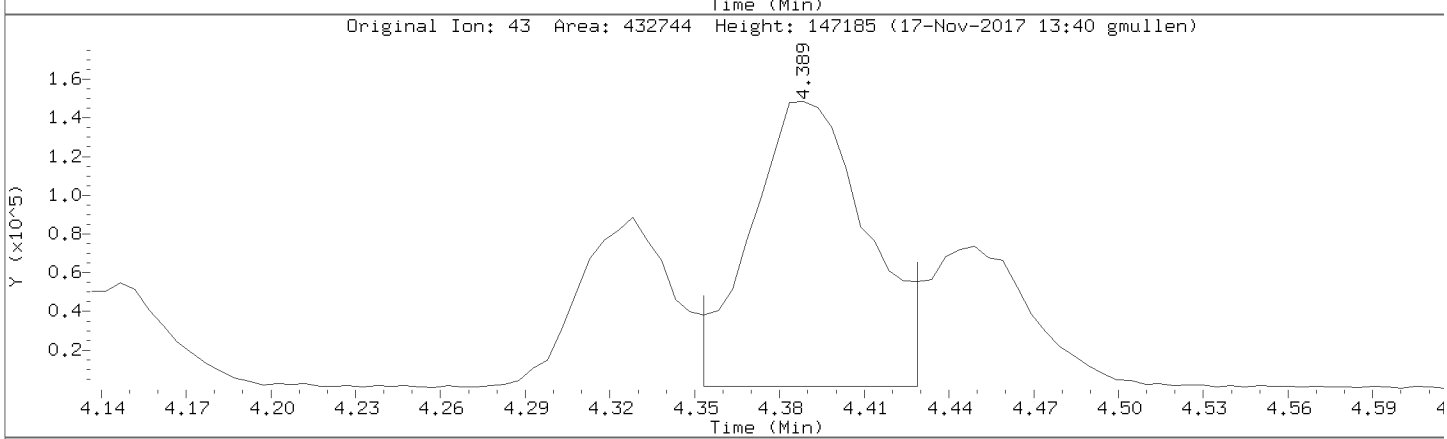
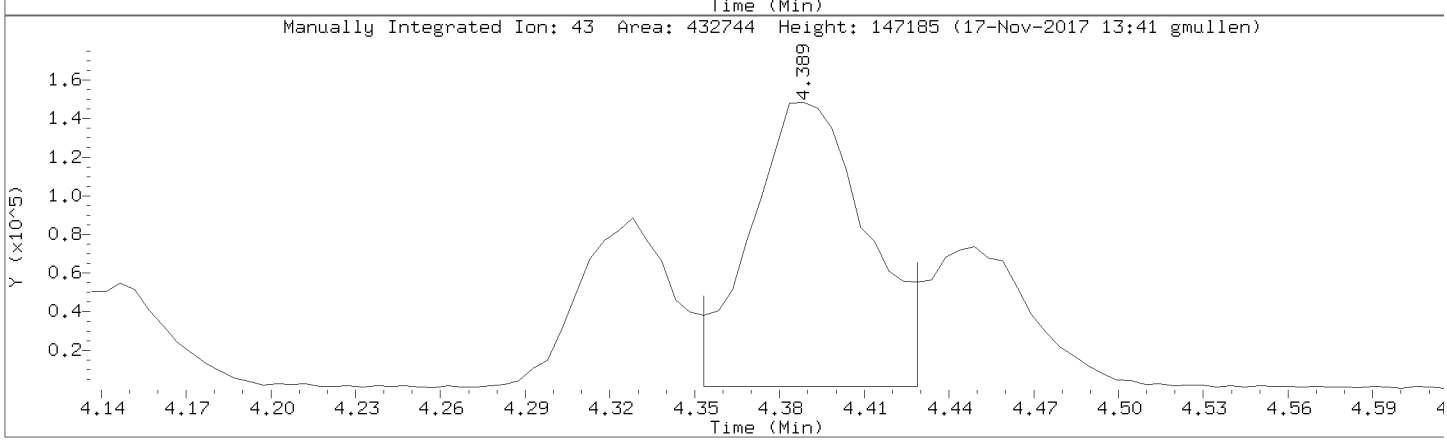
Lab Sample ID: ICV

Compound: Methyl Acetate Review Code: LT
CAS Number: 79-20-9









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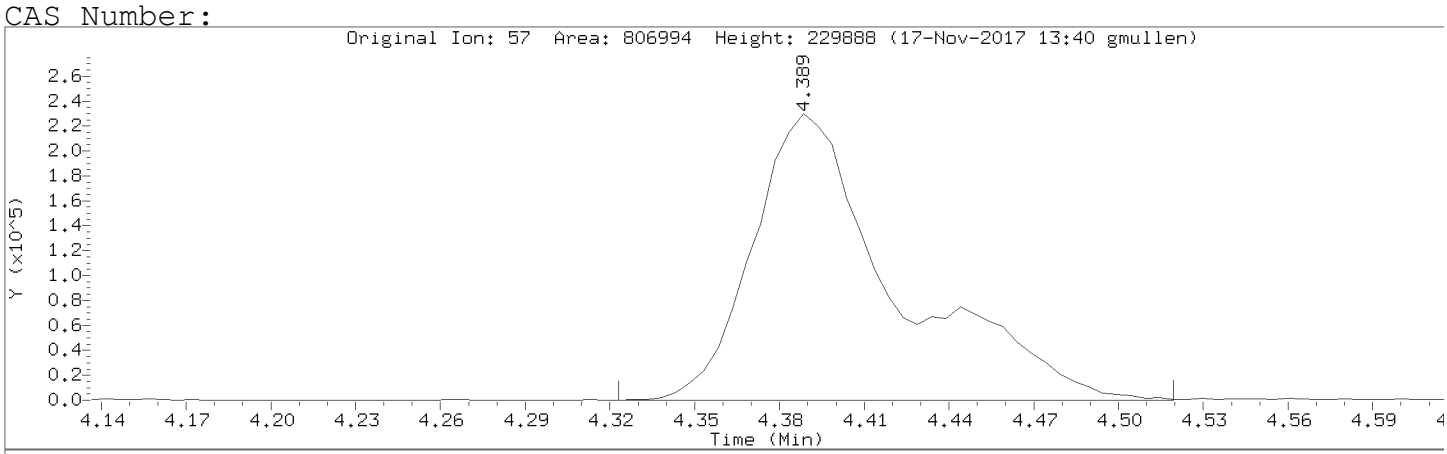
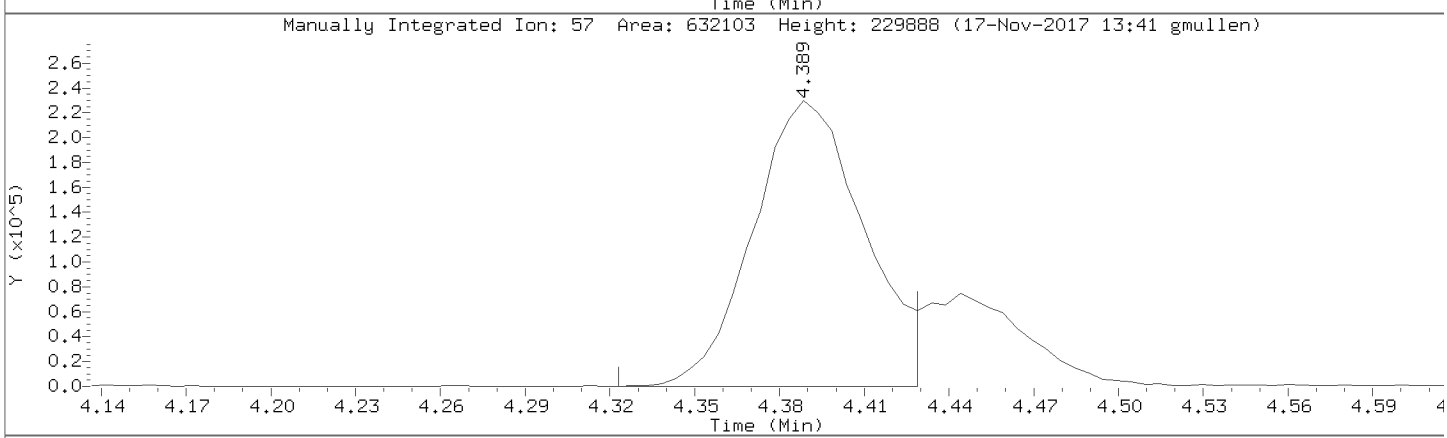
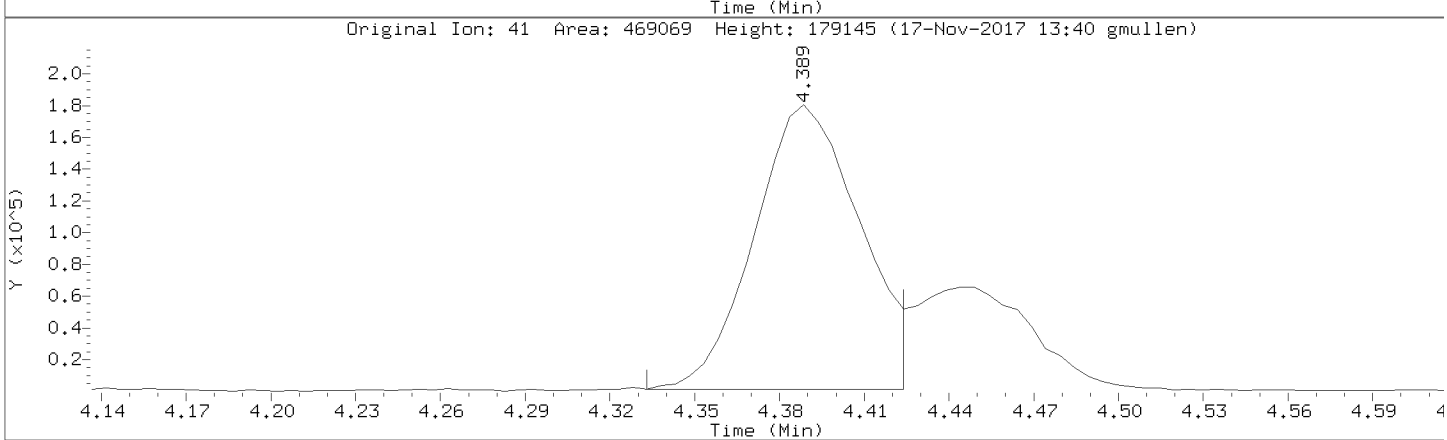
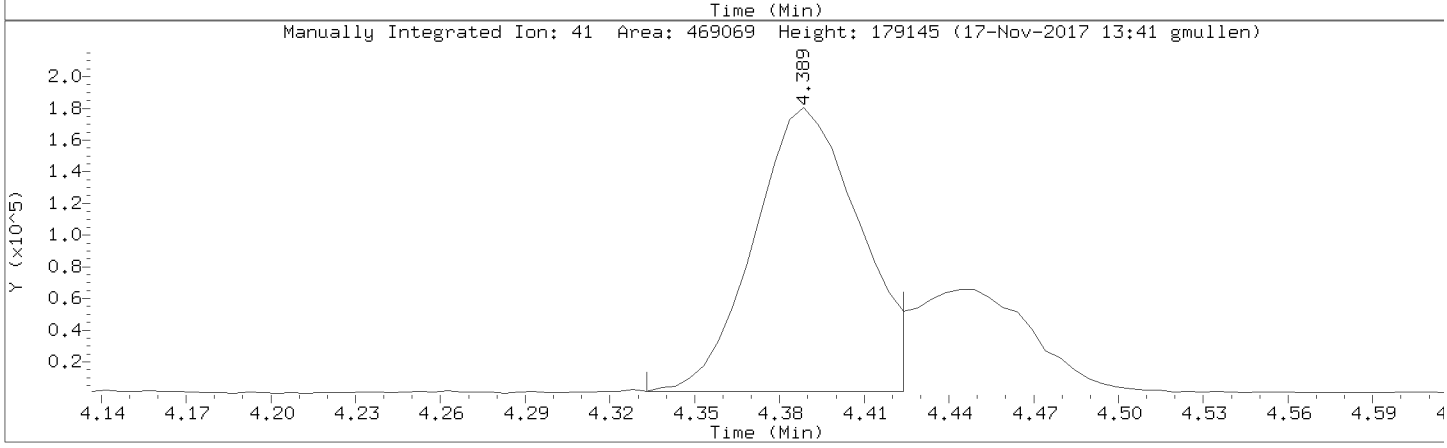
CAS Number:









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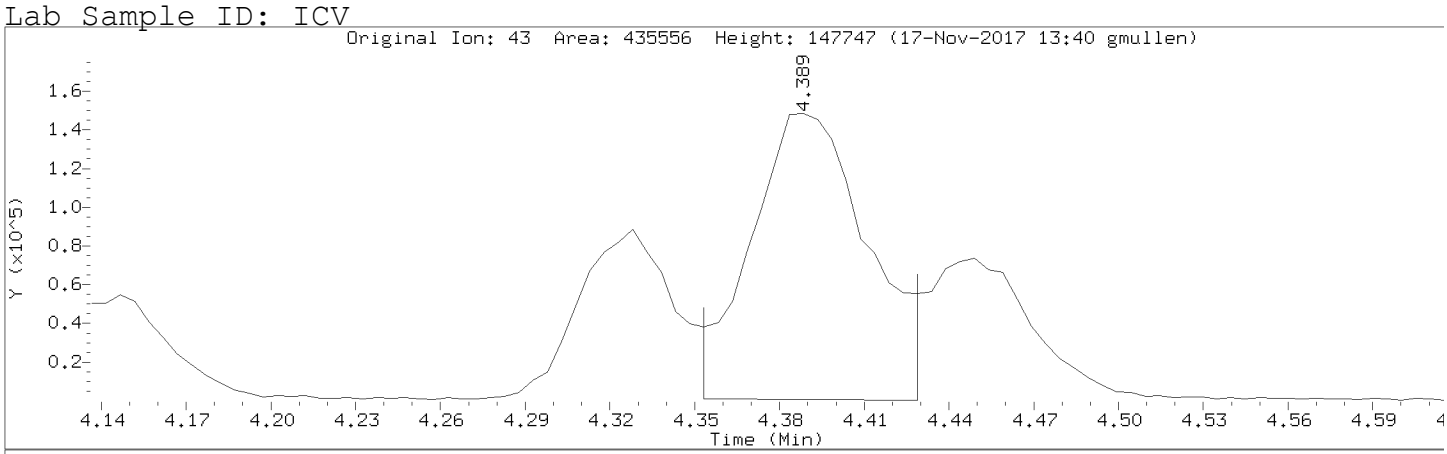

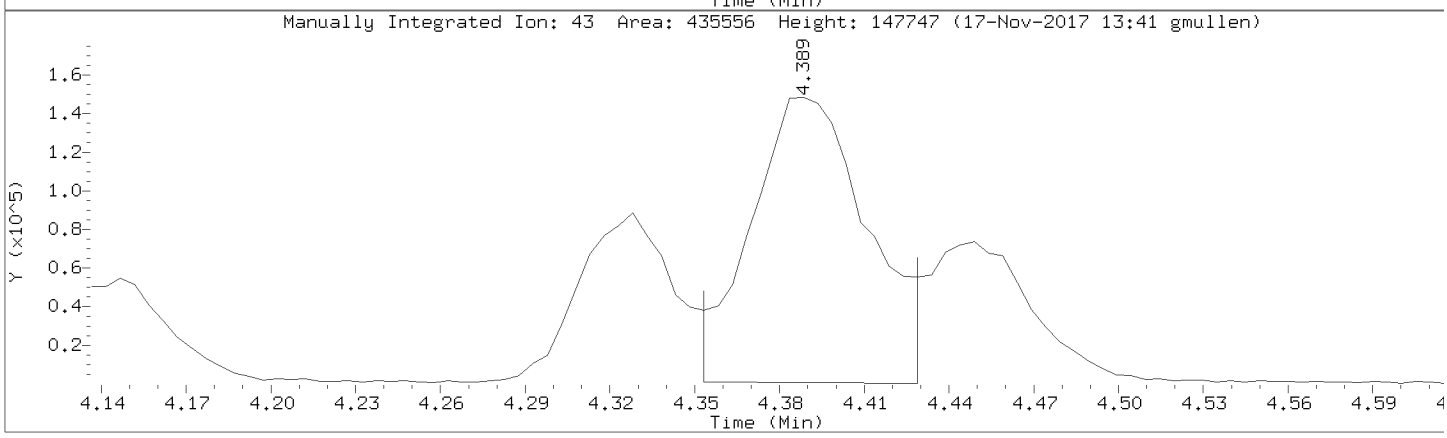

Pace Analytical Services, Inc.

SW846 8260

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Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	453334	50.0000	46.4
2 Chloromethane	50	1.894	1.894	(0.285)	758994	50.0000	46.3
3 Vinyl chloride	62	1.990	1.990	(0.299)	659509	50.0000	42.6
4 Bromomethane	94	2.338	2.338	(0.352)	315524	50.0000	50.0
5 Chloroethane	64	2.484	2.484	(0.374)	298444	50.0000	43.4
6 Trichlorofluoromethane	101	2.640	2.640	(0.397)	624365	50.0000	50.0
7 1,1-Dichloroethene	96	3.250	3.250	(0.489)	353433	50.0000	48.8
8 Carbon disulfide	76	3.275	3.275	(0.492)	1105576	50.0000	46.4
9 1,1,2-Trichlorotrifluoroethane	101	3.325	3.325	(0.500)	401037	50.0000	48.9
10 Iodomethane	142	3.431	3.431	(0.516)	764280	50.0000	49.4
11 Acrolein	56	3.713	3.713	(0.558)	74786	50.0000	48.3
12 Allyl chloride	41	3.894	3.894	(0.586)	821643	50.0000	48.9
13 Methylene Chloride	84	4.046	4.046	(0.608)	375539	50.0000	46.9
14 Acetone	43	4.151	4.151	(0.624)	100362	50.0000	48.1
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.643)	386641	50.0000	48.8
16 Methyl Acetate	74	4.323	4.323	(0.650)	40626	50.0000	48.1(M)
17 n-Hexane	57	4.393	4.393	(0.661)	763124	50.0000	45.4(M)
18 Methyl-tert-butyl ether	73	4.449	4.449	(0.669)	737292	50.0000	47.8
19 Acetonitrile	41	4.766	4.766	(0.717)	464106	500.000	458
20 Chloroprene	53	5.048	5.048	(0.759)	840595	50.0000	49.7
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	903112	50.0000	49.0
22 Acrylonitrile	53	5.154	5.154	(0.775)	144986	50.0000	45.8

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.396	5.396	(0.811)	1981004	50.0000	47.2
	24 cis-1,2-Dichloroethene	96	5.688	5.688	(0.855)	418827	50.0000	46.3
	25 2,2-Dichloropropane	77	5.809	5.809	(0.873)	453846	50.0000	47.4
	26 Cyclohexane	84	5.899	5.899	(0.887)	533922	50.0000	49.3
	27 Bromochloromethane	128	5.899	5.899	(0.887)	209495	50.0000	48.7
	28 Chloroform	83	5.985	5.985	(0.900)	669847	50.0000	49.0
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	552749	50.0000	52.1
	30 Tetrahydrofuran	42	6.156	6.156	(0.926)	150270	50.0000	49.4
	31 1,1,1-Trichloroethane	97	6.192	6.192	(0.931)	586699	50.0000	48.3
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	450942	50.0000	48.7
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	520533	50.0000	47.7
	34 2-Butanone (MEK)	43	6.312	6.312	(0.949)	169662	50.0000	45.4
	35 Benzene	78	6.559	6.559	(0.918)	1433361	50.0000	47.2
	36 Propionitrile	54	6.600	6.600	(0.992)	538164	500.000	487
	37 Methacrylonitrile	41	6.620	6.620	(0.995)	2504214	500.000	483
*	38 Pentafluorobenzene (IS)	99	6.650	6.650	(1.000)	420446	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	515667	50.0000	45.8
	40 Isobutanol	43	6.791	6.791	(1.021)	343237	1050.00	1120
	41 Methylcyclohexane	83	7.093	7.093	(0.993)	581842	50.0000	50.4
	42 Trichloroethene	130	7.108	7.108	(0.995)	433671	50.0000	47.0
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1340471	50.0000	
	44 Dibromomethane	93	7.496	7.496	(1.049)	224700	50.0000	47.4
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	489876	50.0000	47.4
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	481895	50.0000	49.6
	47 Methyl methacrylate	41	7.804	7.804	(1.092)	738742	100.000	97.4
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.849	(1.099)	48505	1000.00	1030
	49 2-Chloroethyl vinyl ether	63	8.222	8.222	(1.151)	500910	100.000	96.8
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	566338	50.0000	50.5
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1465539	50.0000	48.9
	52 Toluene	91	8.539	8.539	(1.195)	1537088	50.0000	48.4
	53 Tetrachloroethene	164	8.902	8.902	(0.909)	413419	50.0000	53.0
	54 4-Methyl-2-Pentanone	43	8.902	8.902	(0.909)	378090	50.0000	51.8
	55 trans-1,3-Dichloropropene	75	8.932	8.932	(1.250)	477297	50.0000	51.0
	56 Ethyl methacrylate	69	9.063	9.063	(1.269)	324129	50.0000	51.5
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	274571	50.0000	46.8
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	341917	50.0000	45.6
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	434843	50.0000	48.0
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	288178	50.0000	46.7
	61 2-Hexanone	43	9.577	9.577	(0.978)	250753	50.0000	49.9
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	587554	50.0000	
	63 Chlorobenzene	112	9.799	9.799	(1.001)	1045257	50.0000	51.0
	64 Ethylbenzene	91	9.814	9.814	(1.003)	1654137	50.0000	47.9
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	380306	50.0000	51.4
	66 m&p-Xylene	106	9.914	9.914	(1.013)	1261547	100.000	94.7
	67 o-Xylene	106	10.207	10.207	(1.043)	614600	50.0000	49.8
	68 Styrene	104	10.242	10.242	(1.046)	1019011	50.0000	50.7
	69 Bromoform	173	10.267	10.267	(1.049)	255956	50.0000	47.6
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	1512895	50.0000	45.5
$	71 4-Bromofluorobenzene (S)	176	10.589	10.589	(0.943)	601007	50.0000	48.4
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	203548	100.000	98.4
	73 Bromobenzene	156	10.655	10.655	(0.948)	471307	50.0000	50.1
	74 n-Propylbenzene	91	10.660	10.660	(0.949)	1800867	50.0000	46.7
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	327612	50.0000	47.8
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	1149291	50.0000	49.3

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.771	10.771	(0.959)	1180584	50.0000	48.5
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	89305	50.0000	49.5
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	1058206	50.0000	49.3
80 tert-Butylbenzene	91	10.962	10.962	(0.976)	618063	50.0000	47.0
81 Pentachloroethane	167	10.982	10.982	(0.978)	274462	50.0000	49.6
82 1,2,4-Trimethylbenzene	105	10.998	10.998	(0.979)	1177950	50.0000	49.2
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	1418921	50.0000	46.2
84 p-Isopropyltoluene	119	11.134	11.134	(0.991)	1163894	50.0000	47.0
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	741563	50.0000	49.5
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	627345	50.0000	
87 1,4-Dichlorobenzene	146	11.244	11.244	(1.001)	738540	50.0000	48.6
88 n-Butylbenzene	91	11.365	11.365	(1.012)	1049576	50.0000	47.7
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	643740	50.0000	49.1
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	97811	50.0000	46.3
91 Hexachloro-1,3-butadiene	225	12.282	12.282	(1.093)	194136	50.0000	49.4
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	310217	50.0000	45.2
93 Naphthalene	128	12.544	12.544	(1.117)	592198	50.0000	52.2
94 1,2,3-Trichlorobenzene	180	12.670	12.670	(1.128)	238347	50.0000	50.2

QC Flag Legend

M - Compound response manually integrated.

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d20.d

Page 4

Date : 04-DEC-2017 15:32

Client ID: ICV

Instrument: 20msvd.i

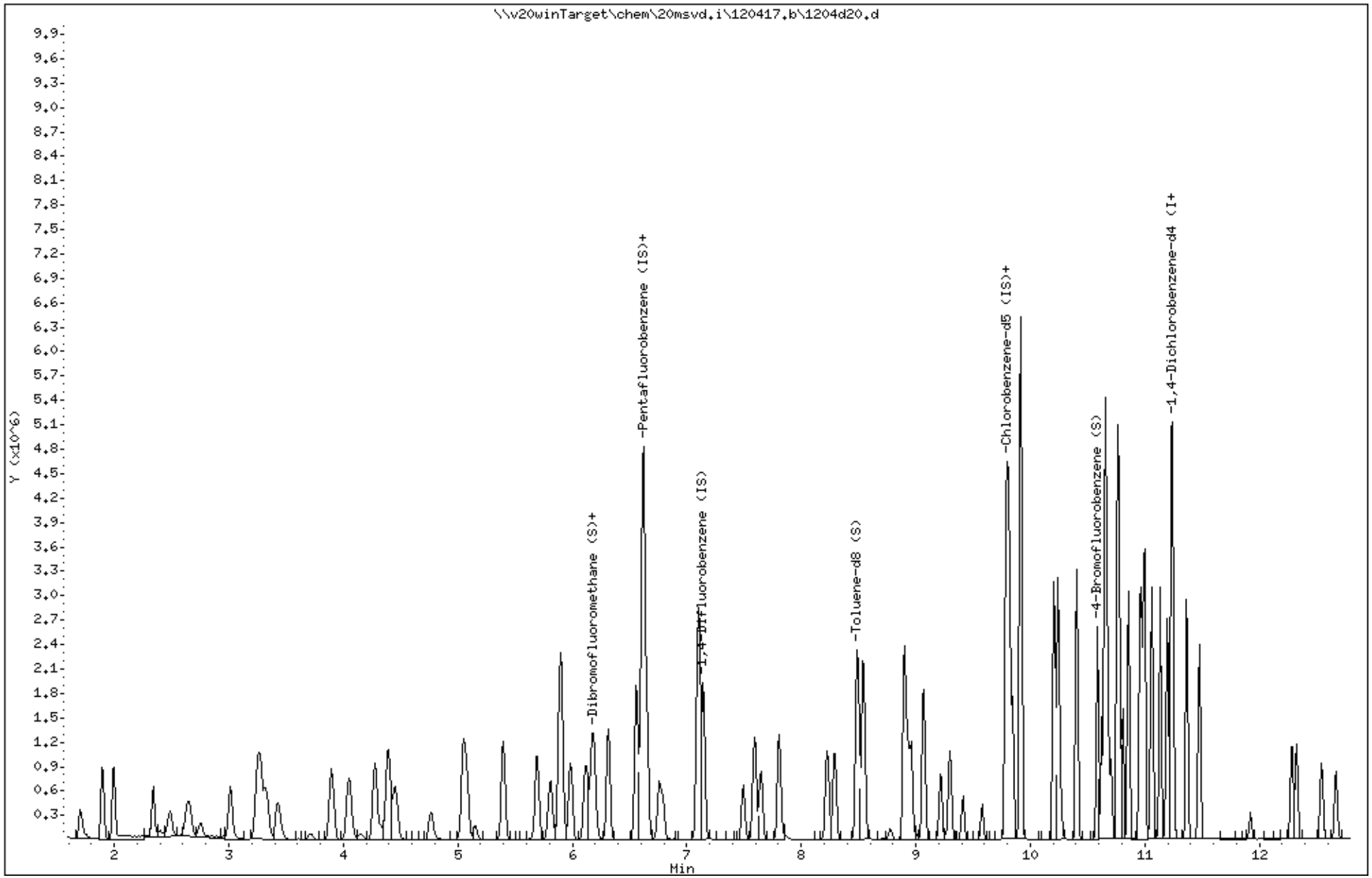
Sample Info: ICV,54935:1

Purge Volume: 5.0

Operator: GEM

Column phase: RTX VMS 30m

Column diameter: 0.25



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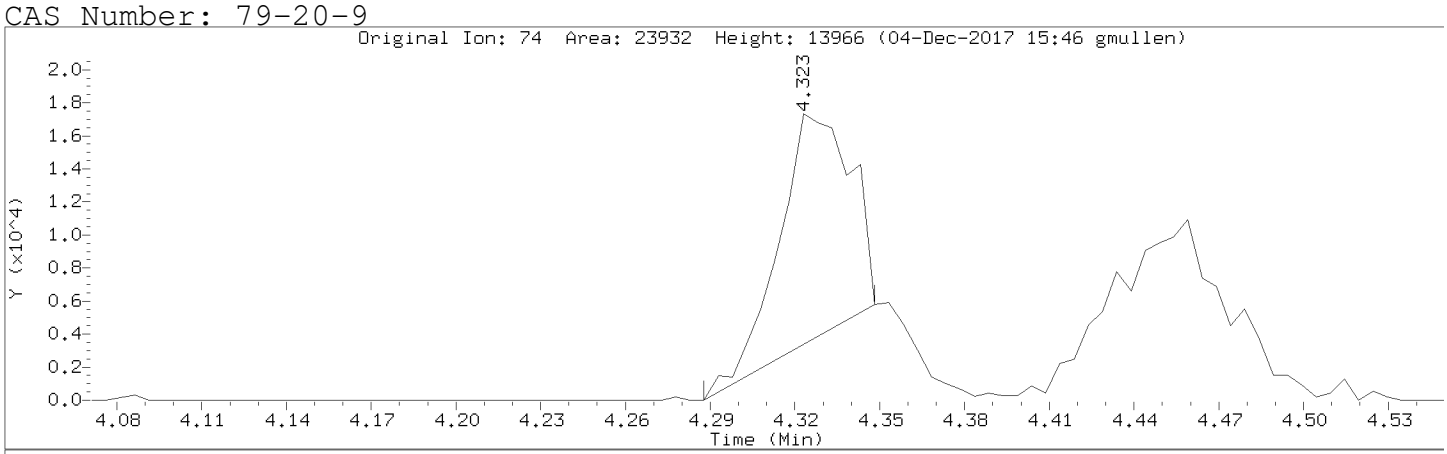
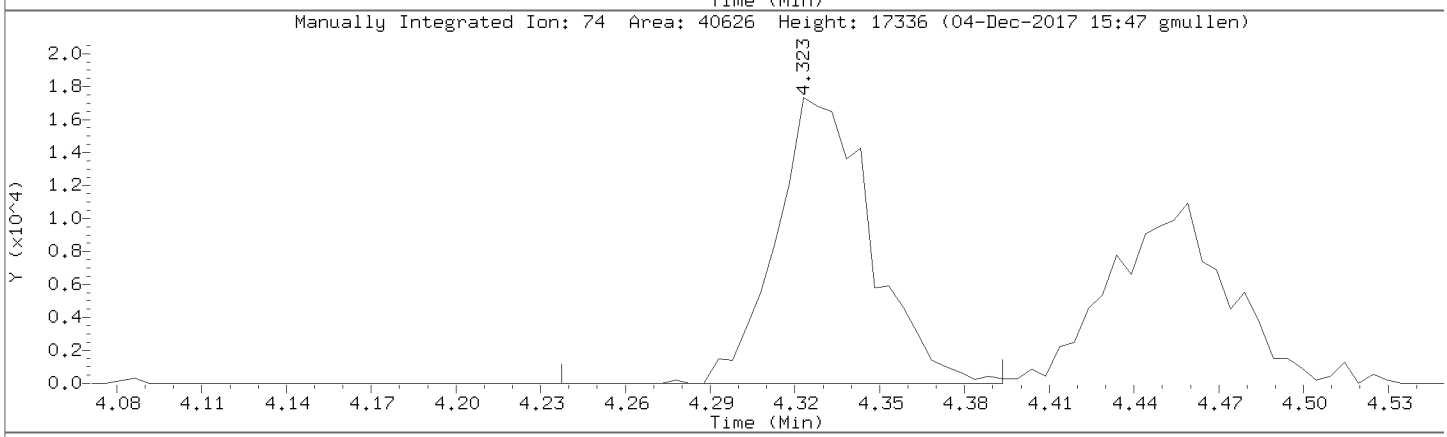
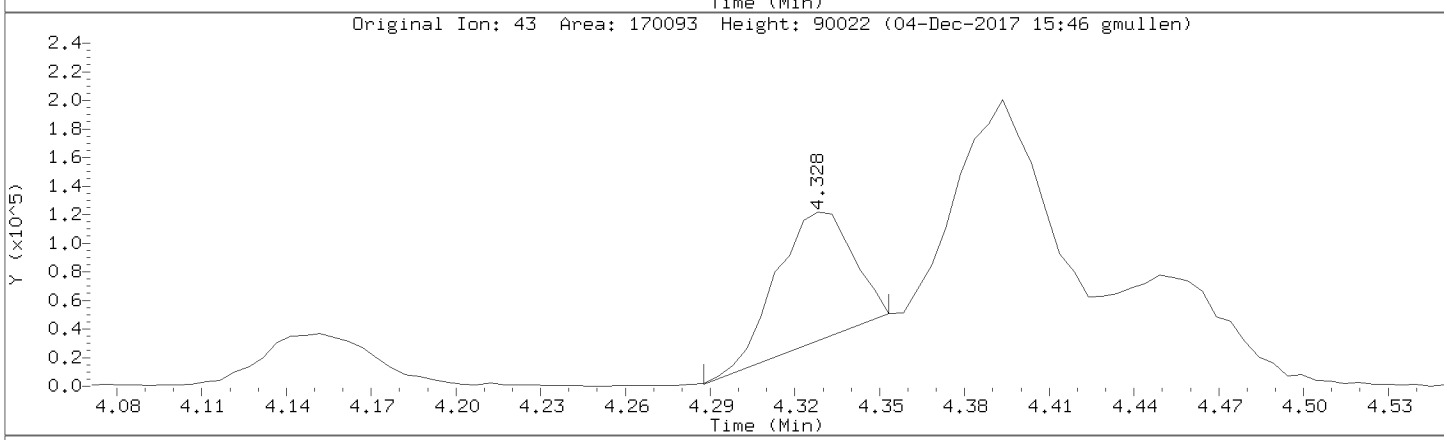
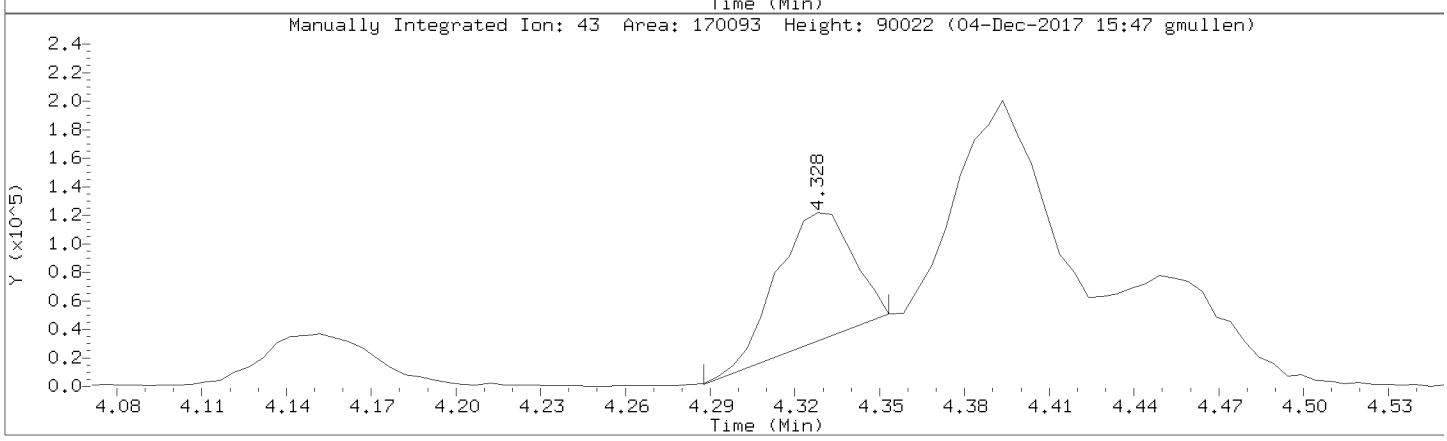
Instrument: 20msvd.i
Lab Sample ID: ICV

Compound: Methyl Acetate Review Code:
CAS Number: 79-20-9









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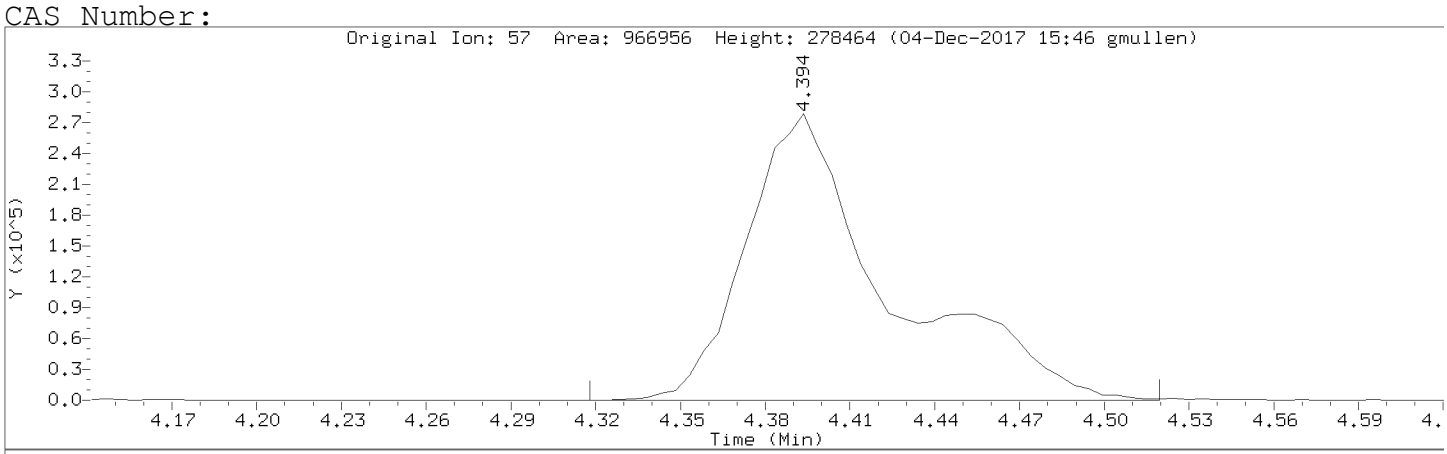
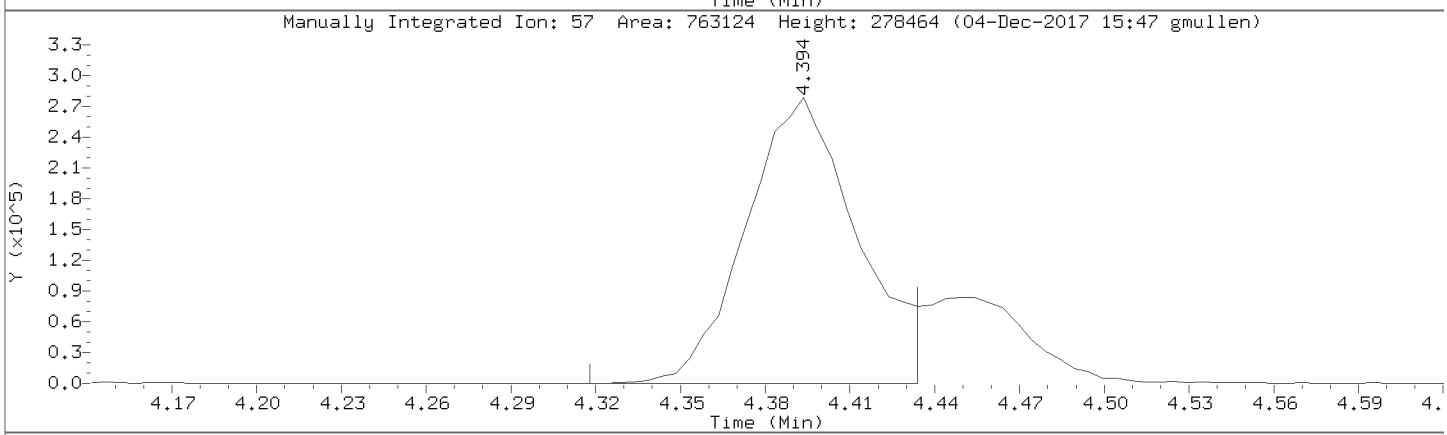
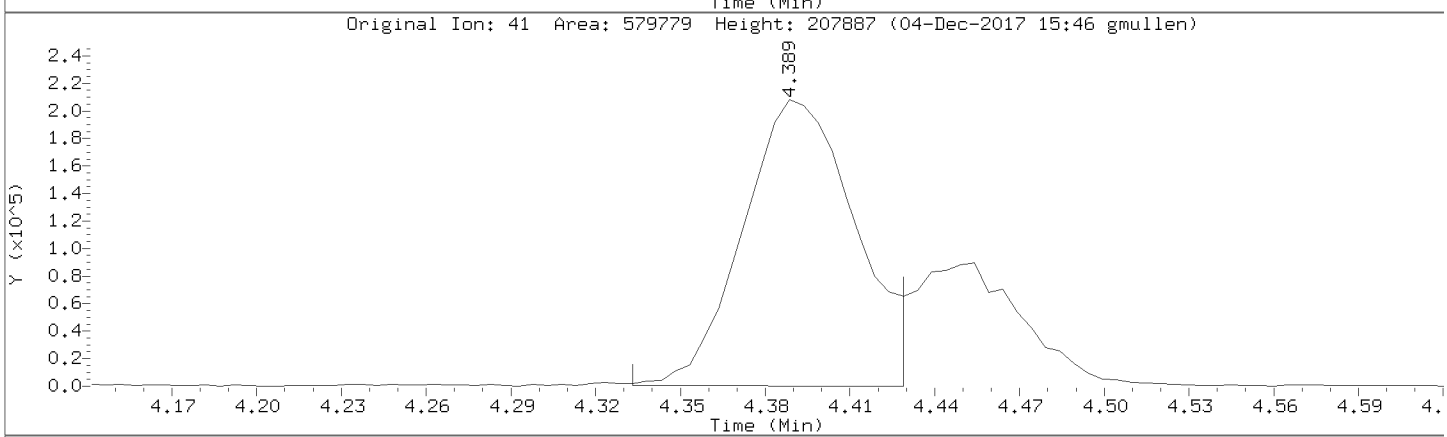
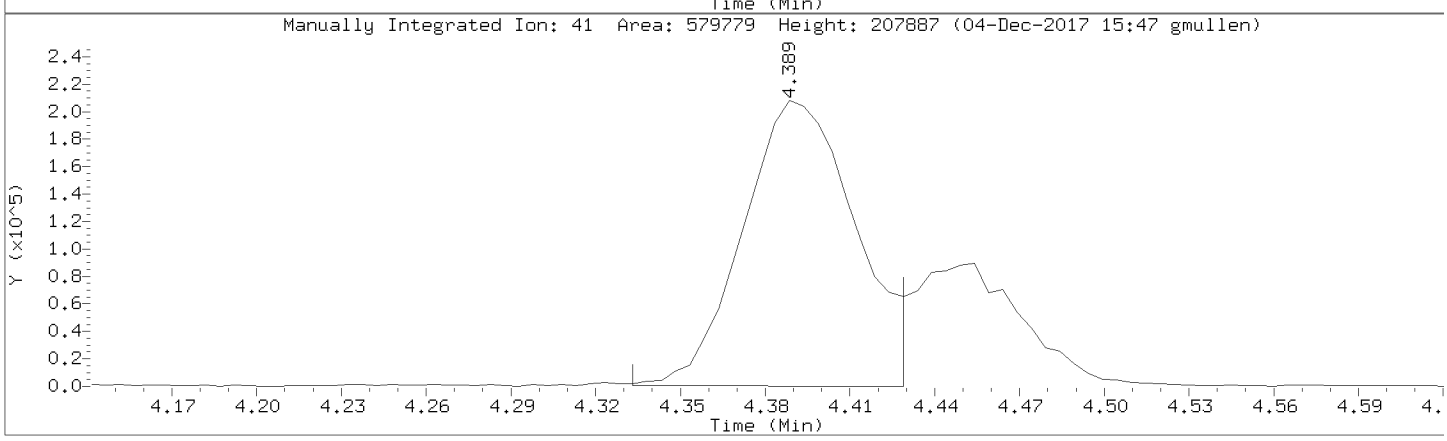
Instrument: 20msvd.i
Lab Sample ID: ICV

Compound: n-Hexane Review Code: GT
CAS Number:









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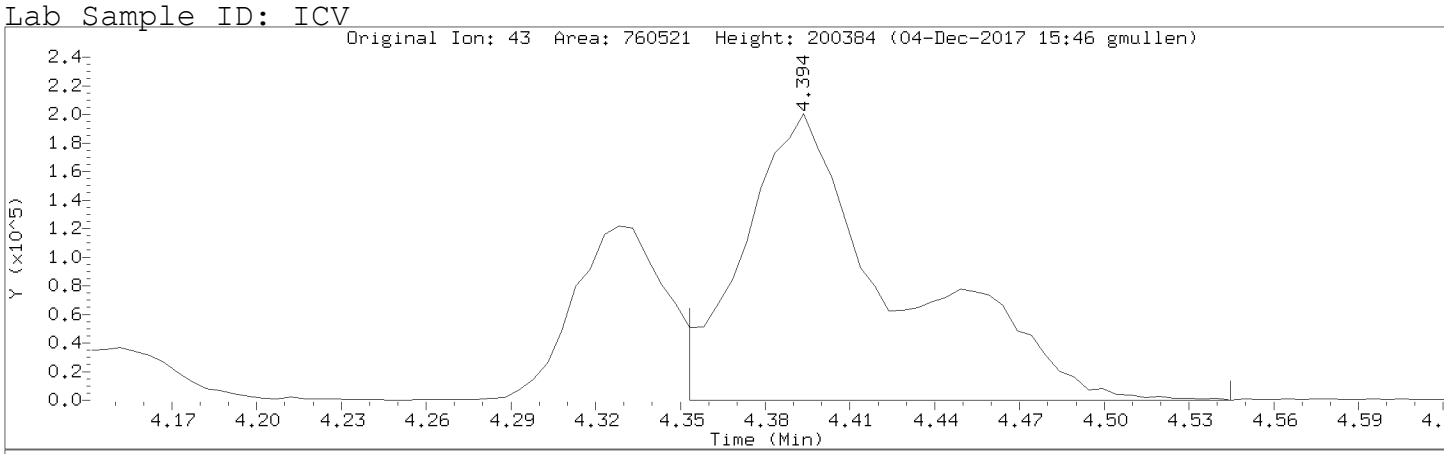

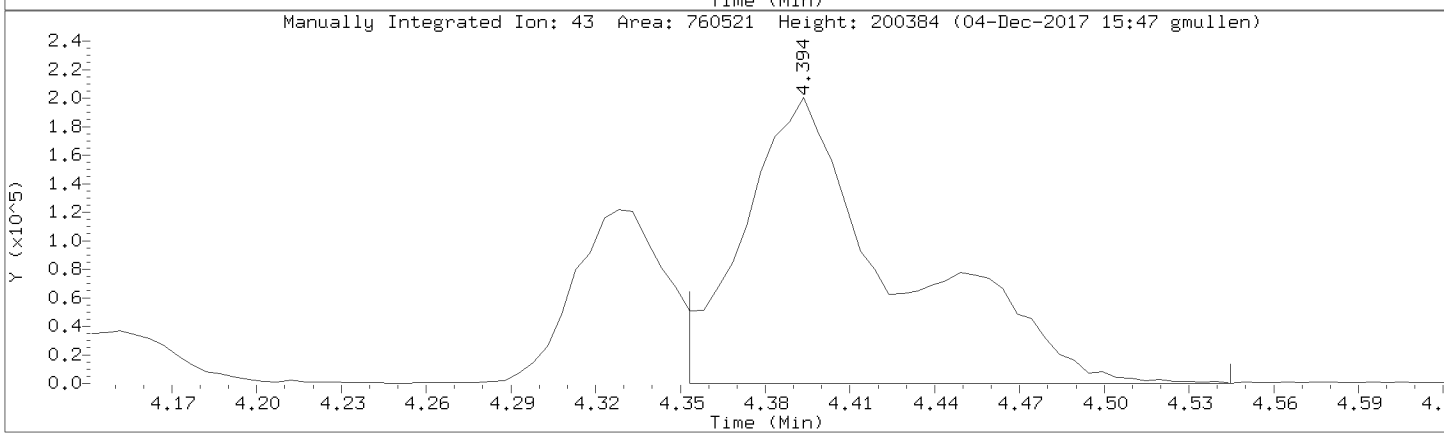

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d04.d
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Comment : SW846 8260
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Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Haloether 229	83	2.237	2.237	(0.337)	222297	50.0000	43.4
2 Haloether 406	85	3.884	3.884	(0.585)	457549	50.0000	52.2
3 Isoflurane	117	4.333	4.333	(0.652)	158545	50.0000	54.8
4 Haloether 508	97	4.358	4.358	(0.656)	136259	50.0000	51.1
5 Enflurane	117	4.584	4.584	(0.690)	320764	50.0000	54.2
6 Halomar	81	5.365	5.365	(0.807)	651998	50.0000	50.3
* 9 Pentafluorobenzene (IS)	99	6.645	6.645	(1.000)	322972	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1043238	50.0000	
7 Haloether 421	67	7.400	7.400	(1.036)	601781	50.0000	48.3
8 Haloether 427	151	7.526	7.526	(1.054)	472708	50.0000	53.8
11 Haloether 428	117	8.111	8.111	(1.135)	469121	50.0000	50.0
12 Methoxyflurane	81	8.161	8.161	(1.142)	867213	50.0000	46.5
13 Haloether 528	211	9.511	9.511	(1.331)	798159	50.0000	50.4
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	445087	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	426267	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d04.d
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Inj Date : 12-DEC-2017 09:40
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Smp Info : vcstd50-ccv,54902:1
Misc Info : 7846
Comment : SW846 8260
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Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.703	1.703	(0.256)	355282	50.0000	47.3
2 Chloromethane	50	1.894	1.894	(0.285)	594197	50.0000	47.2
3 Vinyl chloride	62	1.995	1.995	(0.300)	534322	50.0000	44.9
4 Bromomethane	94	2.343	2.343	(0.353)	236800	50.0000	48.9
5 Chloroethane	64	2.494	2.494	(0.375)	252388	50.0000	47.8
6 Trichlorofluoromethane	101	2.650	2.650	(0.399)	451367	50.0000	47.1
7 1,1-Dichloroethene	96	3.254	3.254	(0.490)	275570	50.0000	49.5
8 Carbon disulfide	76	3.280	3.280	(0.494)	858355	50.0000	46.8
9 1,1,2-Trichlorotrifluoroethane	101	3.330	3.330	(0.501)	313374	50.0000	49.7
10 Iodomethane	142	3.431	3.431	(0.516)	588129	50.0000	49.4
11 Acrolein	56	3.723	3.723	(0.560)	48467	50.0000	40.8
12 Allyl chloride	41	3.899	3.899	(0.587)	598305	50.0000	46.4
13 Methylene Chloride	84	4.045	4.045	(0.609)	285338	50.0000	46.4
14 Acetone	43	4.146	4.146	(0.624)	94964	50.0000	59.3
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.644)	300236	50.0000	49.4
16 Methyl Acetate	74	4.333	4.333	(0.652)	30093	50.0000	46.4
17 n-Hexane	57	4.393	4.393	(0.661)	640862	50.0000	49.7
18 Methyl-tert-butyl ether	73	4.453	4.453	(0.670)	564875	50.0000	47.7
19 Acetonitrile	41	4.766	4.766	(0.717)	371705	500.000	478
20 Chloroprene	53	5.048	5.048	(0.760)	648320	50.0000	49.9
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	726634	50.0000	51.3
22 Acrylonitrile	53	5.149	5.149	(0.775)	114216	50.0000	47.0

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Vinyl acetate	43	5.395	5.395	(0.812)	1569575	50.0000	48.7
	24 cis-1,2-Dichloroethene	96	5.693	5.693	(0.857)	331147	50.0000	47.6
	25 2,2-Dichloropropane	77	5.809	5.809	(0.874)	378913	50.0000	51.5
	26 Cyclohexane	84	5.894	5.894	(0.887)	421476	50.0000	50.6
	27 Bromochloromethane	128	5.904	5.904	(0.889)	155516	50.0000	47.1
	28 Chloroform	83	5.985	5.985	(0.901)	537434	50.0000	51.1
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	429855	50.0000	52.0
	30 Tetrahydrofuran	42	6.151	6.151	(0.926)	107564	50.0000	46.1
	31 1,1,1-Trichloroethane	97	6.191	6.191	(0.932)	472372	50.0000	50.7
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.929)	352247	50.0000	49.5
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	418456	50.0000	49.3
	34 2-Butanone (MEK)	43	6.317	6.317	(0.951)	141672	50.0000	49.3
	35 Benzene	78	6.559	6.559	(0.918)	1178247	50.0000	49.8
	36 Propionitrile	54	6.600	6.600	(0.993)	412050	500.000	486
	37 Methacrylonitrile	41	6.620	6.620	(0.996)	1924359	500.000	483
*	38 Pentafluorobenzene (IS)	99	6.645	6.645	(1.000)	322972	50.0000	
	39 1,2-Dichloroethane	62	6.756	6.756	(0.946)	425109	50.0000	48.5
	40 Isobutanol	43	6.786	6.786	(1.021)	224406	1050.00	950
	41 Methylcyclohexane	83	7.098	7.098	(0.994)	454953	50.0000	50.6
	42 Trichloroethene	130	7.108	7.108	(0.995)	365453	50.0000	50.9
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1043238	50.0000	
	44 Dibromomethane	93	7.491	7.491	(1.049)	176096	50.0000	47.7
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	402003	50.0000	50.0
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	368767	50.0000	48.8
	47 Methyl methacrylate	41	7.804	7.804	(1.092)	564701	100.000	95.6
	48 1,4-Dioxane (p-Dioxane)	88	7.849	7.849	(1.099)	32243	1000.00	880
	49 2-Chloroethyl vinyl ether	63	8.227	8.227	(1.152)	387985	100.000	96.3
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	443512	50.0000	50.8
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1121173	50.0000	48.0
	52 Toluene	91	8.539	8.539	(1.195)	1238415	50.0000	50.1
	53 Tetrachloroethene	164	8.897	8.897	(0.909)	325657	50.0000	55.2
	54 4-Methyl-2-Pentanone	43	8.907	8.907	(0.910)	286508	50.0000	51.8
	55 trans-1,3-Dichloropropene	75	8.927	8.927	(1.250)	365230	50.0000	50.1
	56 Ethyl methacrylate	69	9.068	9.068	(1.269)	233534	50.0000	47.7
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	221203	50.0000	48.5
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	271371	50.0000	47.6
	59 1,3-Dichloropropane	76	9.300	9.300	(0.950)	344018	50.0000	50.1
	60 1,2-Dibromoethane (EDB)	107	9.411	9.411	(1.317)	223746	50.0000	46.6
	61 2-Hexanone	43	9.577	9.577	(0.978)	198652	50.0000	52.2
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	445087	50.0000	
	63 Chlorobenzene	112	9.798	9.798	(1.001)	804630	50.0000	51.8
	64 Ethylbenzene	91	9.814	9.814	(1.003)	1362337	50.0000	52.0
	65 1,1,1,2-Tetrachloroethane	131	9.844	9.844	(1.006)	298670	50.0000	53.3
	66 m&p-Xylene	106	9.914	9.914	(1.013)	1065496	100.000	106
	67 o-Xylene	106	10.206	10.206	(1.043)	489838	50.0000	52.4
	68 Styrene	104	10.242	10.242	(1.046)	788494	50.0000	51.8
	69 Bromoform	173	10.262	10.262	(1.048)	186088	50.0000	45.8
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	1250942	50.0000	55.4
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	438729	50.0000	52.0
	72 trans-1,4-Dichloro-2-butene	88	10.625	10.625	(0.946)	99507	100.000	73.3
	73 Bromobenzene	156	10.655	10.655	(0.948)	358712	50.0000	56.1
	74 n-Propylbenzene	91	10.655	10.655	(0.948)	1461540	50.0000	55.8
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	250437	50.0000	53.7
	76 2-Chlorotoluene	91	10.761	10.761	(0.958)	877544	50.0000	55.4

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.766	10.766	(0.958)	917537	50.0000	55.5
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	66283	50.0000	54.1
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	803233	50.0000	55.1
80 tert-Butylbenzene	91	10.957	10.957	(0.975)	509244	50.0000	57.0
81 Pentachloroethane	167	10.982	10.982	(0.978)	211425	50.0000	56.2
82 1,2,4-Trimethylbenzene	105	10.997	10.997	(0.979)	917848	50.0000	56.4
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	1151326	50.0000	55.2
84 p-Isopropyltoluene	119	11.133	11.133	(0.991)	920448	50.0000	54.7
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	570225	50.0000	56.0
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	426267	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.239	(1.000)	554739	50.0000	53.7
88 n-Butylbenzene	91	11.365	11.365	(1.012)	821044	50.0000	54.9
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	490678	50.0000	55.1
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	72428	50.0000	50.3
91 Hexachloro-1,3-butadiene	225	12.282	12.282	(1.093)	133538	50.0000	50.0
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	206421	50.0000	44.3
93 Naphthalene	128	12.539	12.539	(1.116)	376995	50.0000	49.0
94 1,2,3-Trichlorobenzene	180	12.670	12.670	(1.128)	142103	50.0000	44.0

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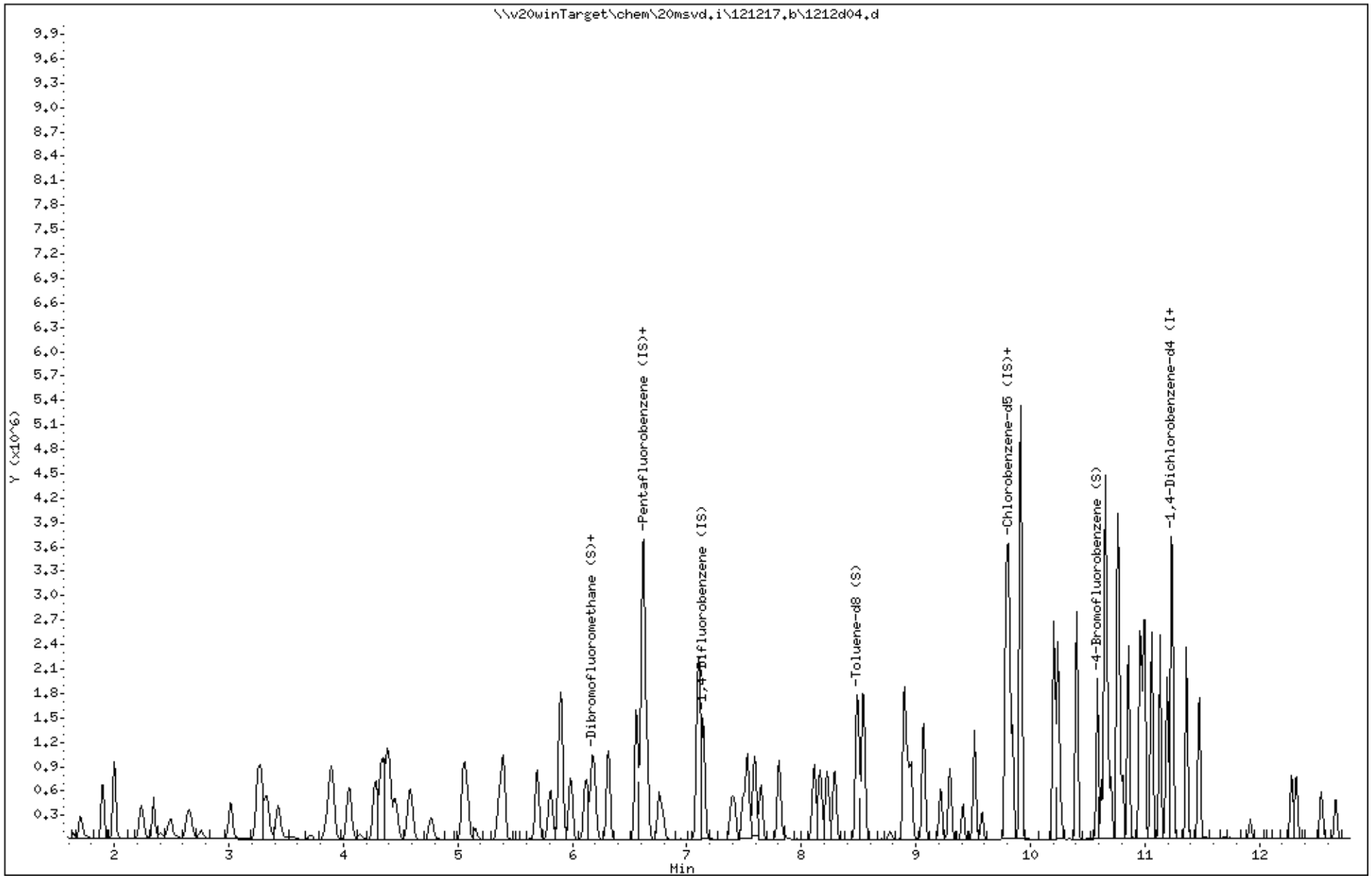

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Lab Sample ID: CCV
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d04.d
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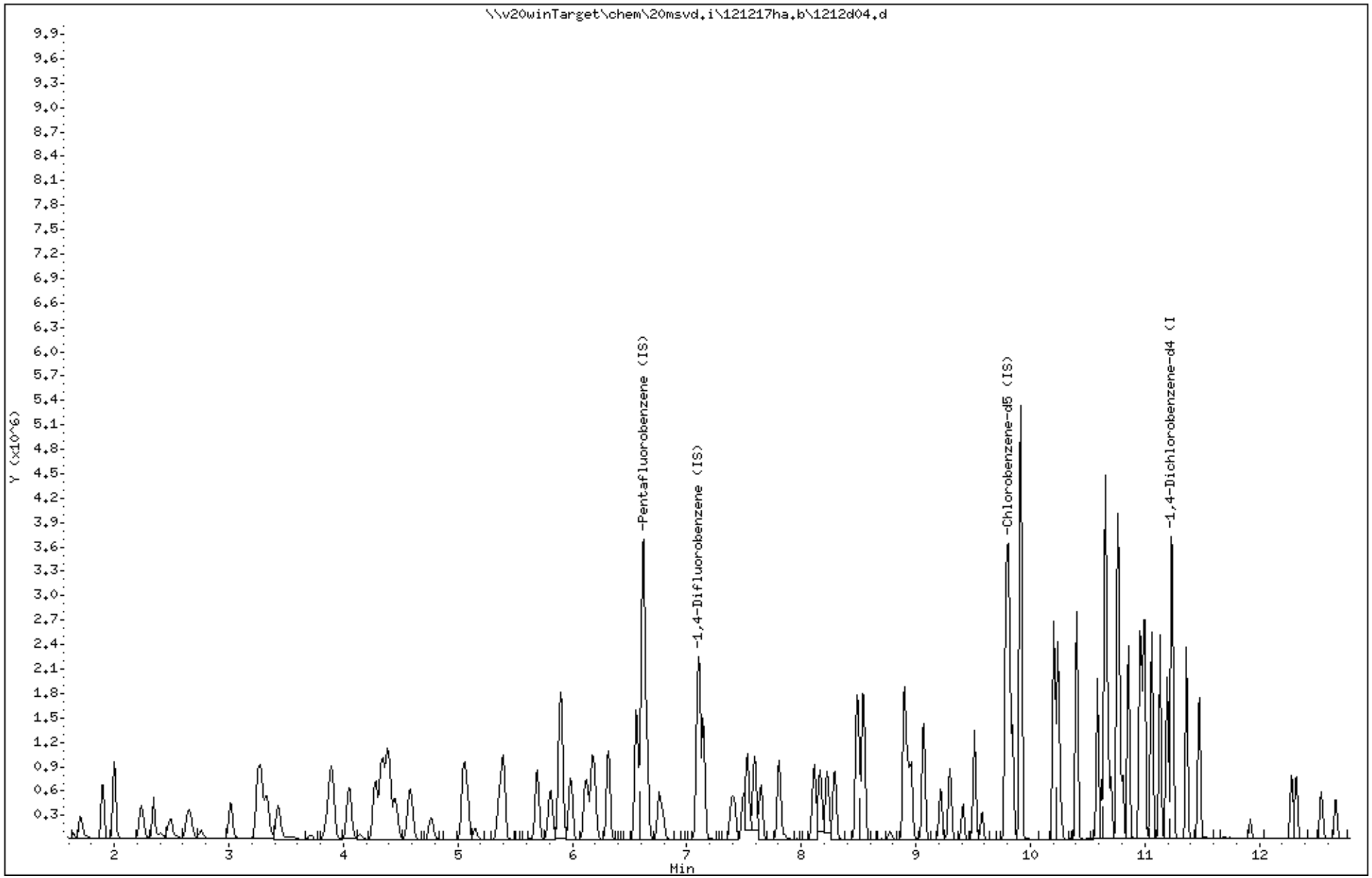

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Lab Sample ID: CCV
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d03bfb.d

Date : 17-NOV-2017 08:53

Client ID: BFB_TUNE

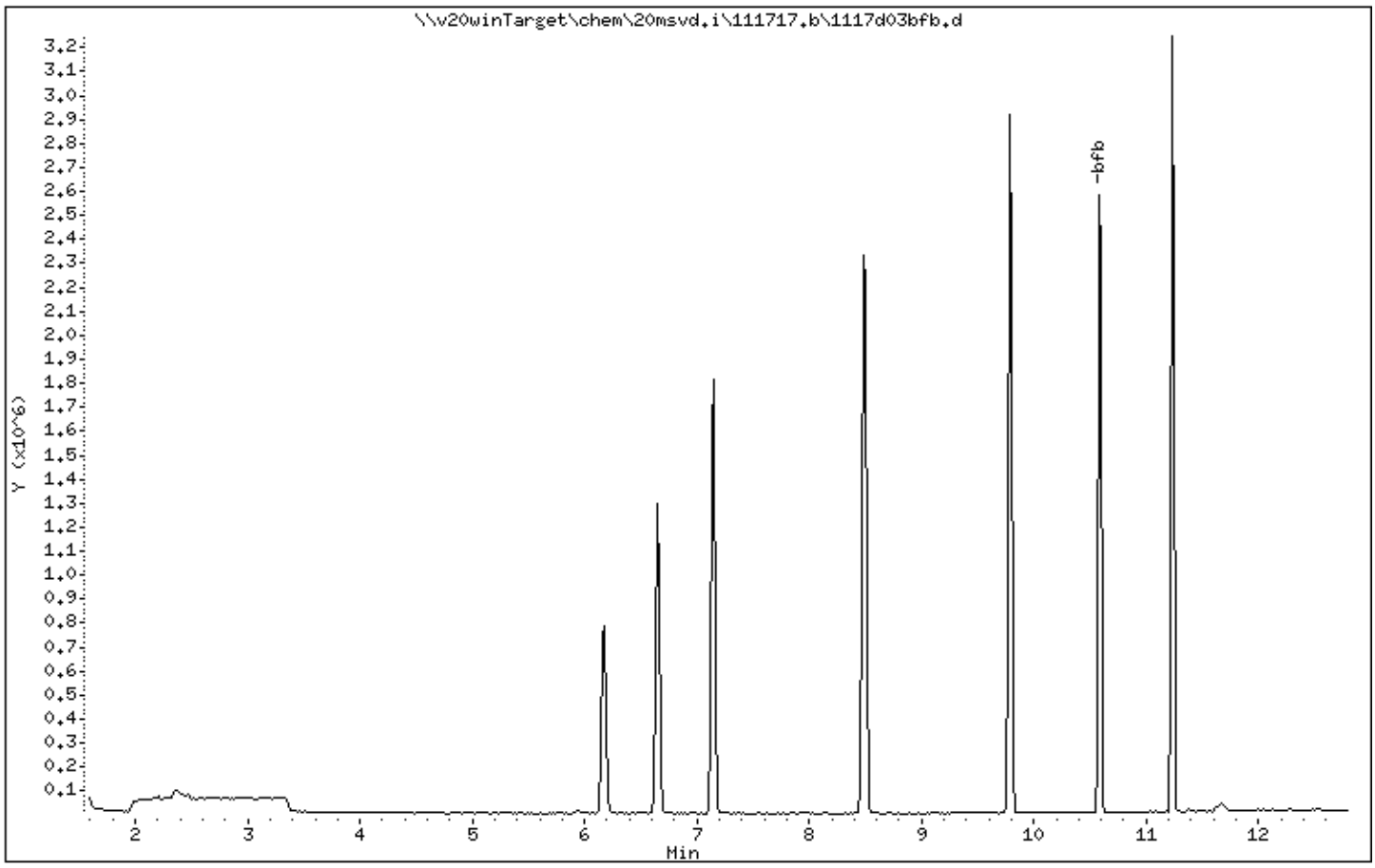
Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX

Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d03bfb.d

Date : 17-NOV-2017 08:53

Client ID: BFB_TUNE

Instrument: 20msvd.i

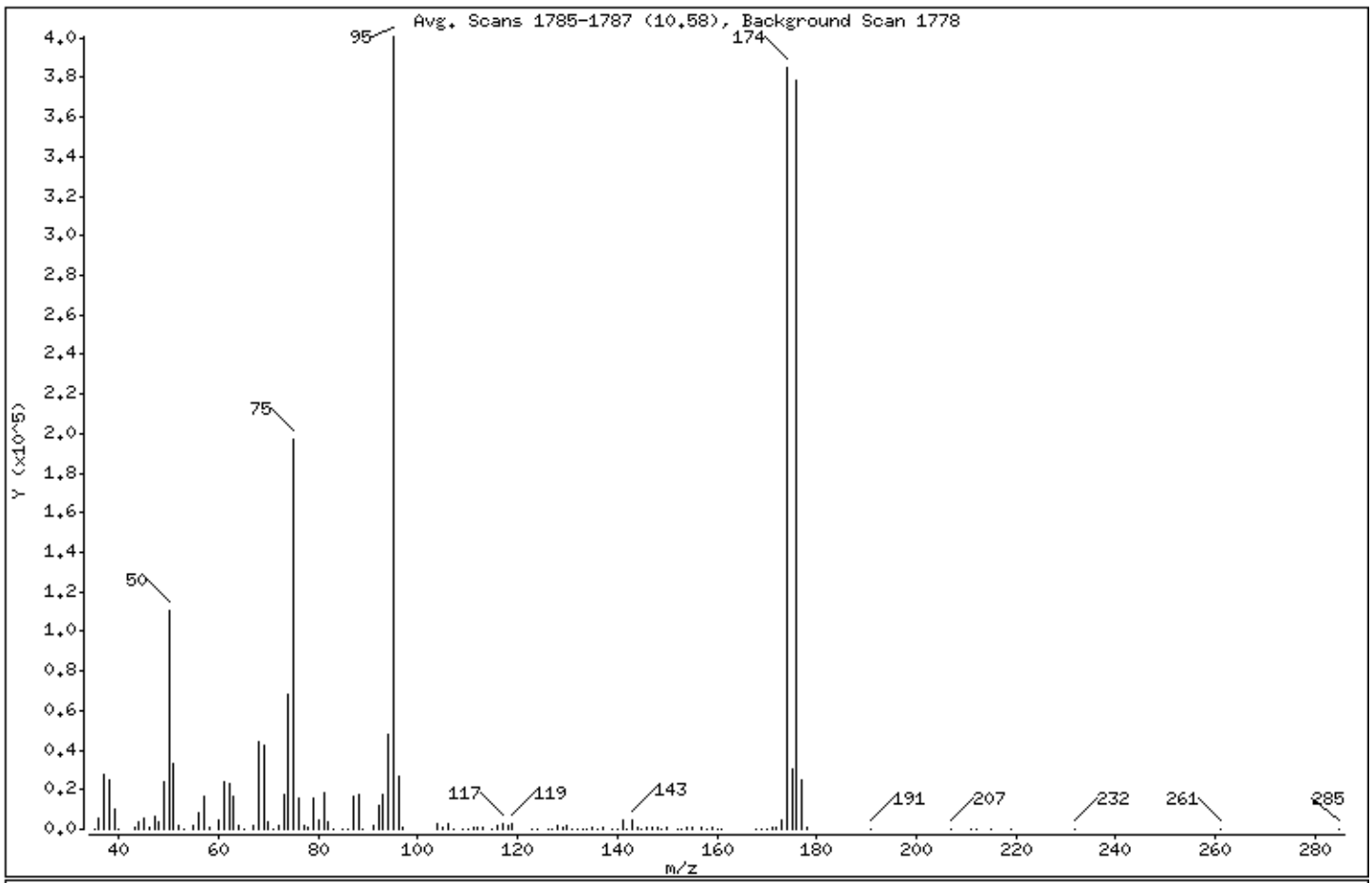
Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.64
75	30.00 - 60.00% of mass 95	49.16
96	5.00 - 9.00% of mass 95	6.70
173	Less than 2.00% of mass 174	1.05 (1.09)
174	50.00 - 120.00% of mass 95	96.13
175	5.00 - 9.00% of mass 174	7.68 (7.99)
176	95.00 - 101.00% of mass 174	94.47 (98.27)
177	5.00 - 9.00% of mass 176	6.30 (6.67)

Data File: \\v20winTarget\chem\20msvd.i\111717.b\1117d03bfb.d

Date : 17-NOV-2017 08:53

Client ID: BFB_TUNE

Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX

Column diameter: 0.25

Data File: 1117d03bfb.d
Spectrum: Avg. Scans 1785-1787 (10.58), Background Scan 1778
Location of Maximum: 95.00
Number of points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	68	72.00	2202	113.00	763	152.00	109
36.00	5119	73.00	17176	115.00	353	153.00	343
37.00	27776	74.00	68216	116.00	1898	154.00	461
38.00	25168	75.00	196928	117.00	2695	155.00	756
39.00	10157	76.00	15538	118.00	1906	157.00	578
40.00	224	77.00	2226	119.00	2501	158.00	142
43.00	680	78.00	1211	123.00	62	159.00	553
44.00	3278	79.00	16074	124.00	275	160.00	100
45.00	5249	80.00	4926	126.00	183	161.00	300
46.00	521	81.00	18400	127.00	58	168.00	68
47.00	6552	82.00	3851	128.00	1638	169.00	201
48.00	3493	83.00	342	129.00	510	170.00	438
49.00	23952	85.00	135	130.00	1588	171.00	530
50.00	110704	86.00	91	131.00	394	172.00	1280
51.00	32832	87.00	16400	132.00	86	173.00	4206
52.00	2290	88.00	17552	133.00	143	174.00	385088
53.00	287	89.00	347	134.00	254	175.00	30776
55.00	1457	91.00	1856	135.00	943	176.00	378432
56.00	8619	92.00	11955	136.00	82	177.00	25240
57.00	16155	93.00	17864	137.00	525	178.00	619
58.00	702	94.00	47680	139.00	186	191.00	88
60.00	4797	95.00	400576	140.00	457	207.00	349
61.00	24176	96.00	26824	141.00	4528	211.00	262
62.00	22952	97.00	721	142.00	282	212.00	62
63.00	16904	104.00	2361	143.00	4844	215.00	156
64.00	1449	105.00	642	144.00	462	219.00	71
65.00	122	106.00	2401	145.00	291	232.00	60
67.00	1412	107.00	443	146.00	720	261.00	72
68.00	44104	109.00	212	147.00	464	285.00	81
69.00	42728	110.00	60	148.00	1366		
70.00	3324	111.00	676	149.00	401		
71.00	371	112.00	468	150.00	555		

Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d06bfb.d

Date : 04-DEC-2017 10:22

Client ID: BFB_TUNE

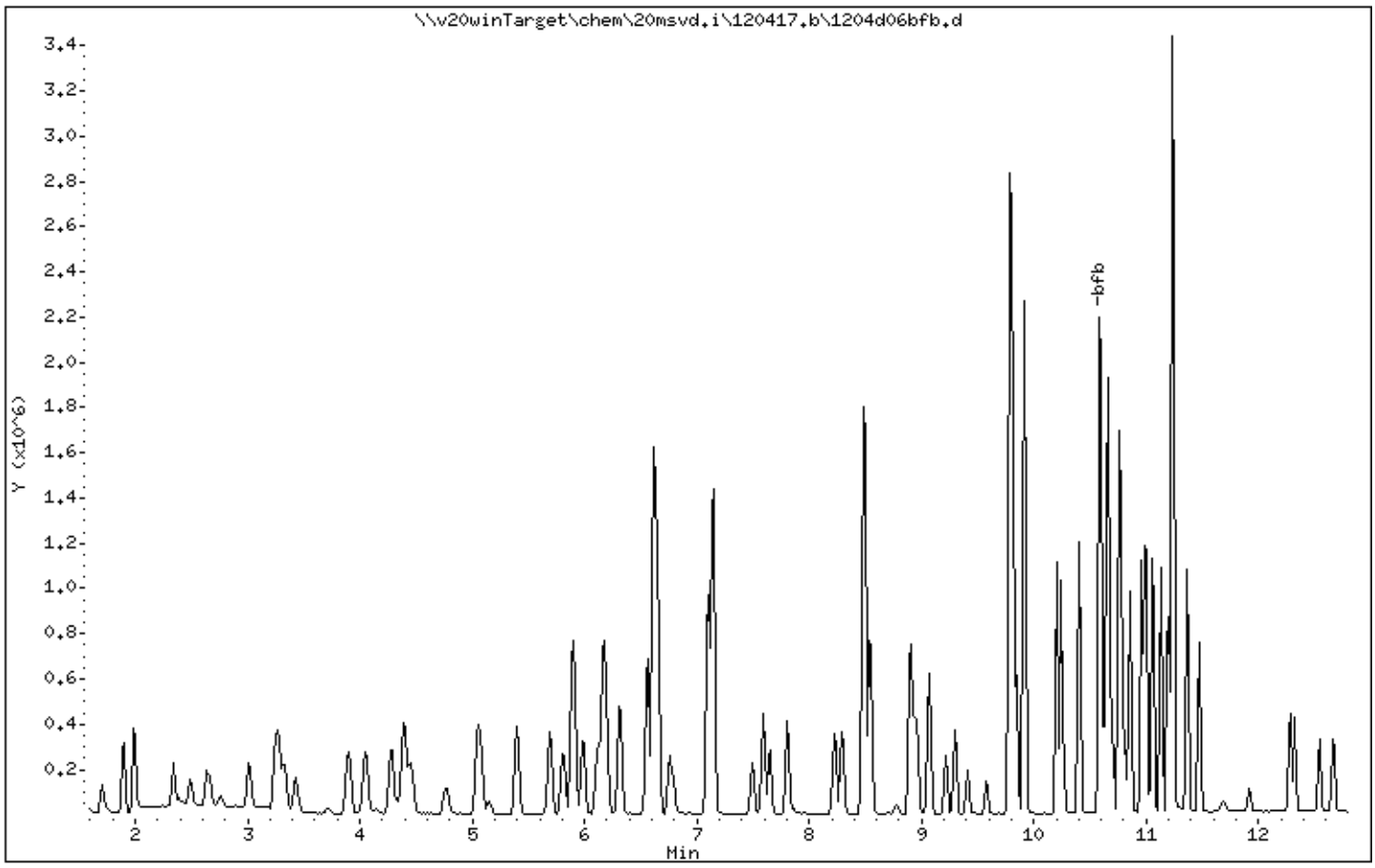
Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX

Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\120417.b\1204d06bfb.d Page 2

Date : 04-DEC-2017 10:22

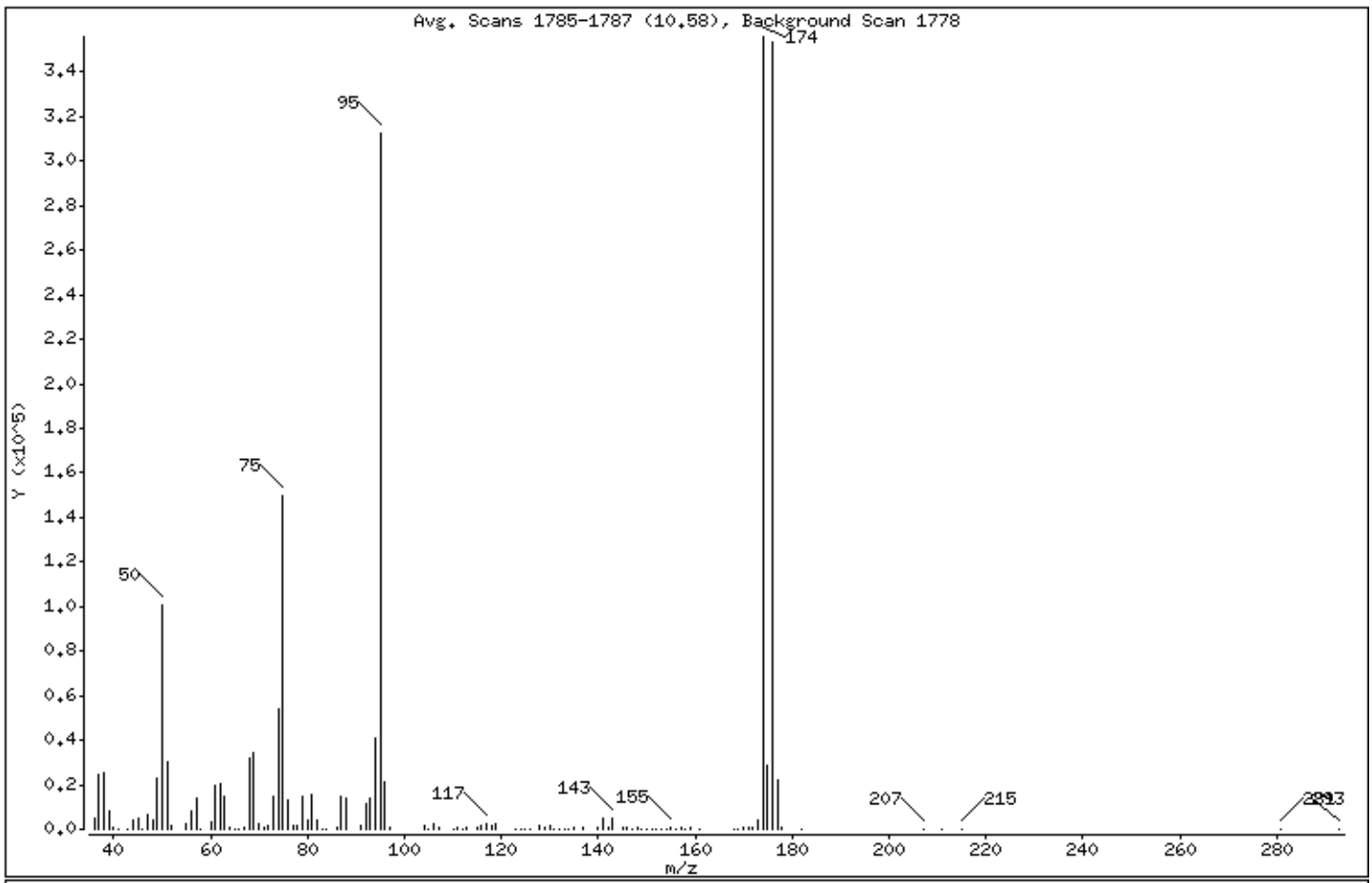
Client ID: BFB_TUNE Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	32.15
75	30.00 - 60.00% of mass 95	48.00
96	5.00 - 9.00% of mass 95	6.91
173	Less than 2.00% of mass 174	1.31 (1.15)
174	50.00 - 120.00% of mass 95	113.84
175	5.00 - 9.00% of mass 174	9.25 (8.13)
176	95.00 - 101.00% of mass 174	113.00 (99.26)
177	5.00 - 9.00% of mass 176	7.11 (6.29)

Date : 04-DEC-2017 10:22

Client ID: BFB_TUNE Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX Column diameter: 0.25

Data File: 1204d06bfb.d
Spectrum: Avg. Scans 1785-1787 (10.58), Background Scan 1778
Location of Maximum: 174.00
Number of points: 118

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4783	70.00	2517	111.00	744	150.00	402
37.00	24824	71.00	454	112.00	257	151.00	57
38.00	25216	72.00	1342	113.00	446	152.00	212
39.00	8292	73.00	14728	115.00	490	153.00	153
40.00	982	74.00	54328	116.00	1496	154.00	233
41.00	130	75.00	150080	117.00	2678	155.00	1143
43.00	226	76.00	13381	118.00	1709	156.00	151
44.00	4181	77.00	1826	119.00	2241	157.00	771
45.00	4533	78.00	1675	123.00	143	158.00	54
46.00	169	79.00	14636	124.00	295	159.00	602
47.00	6239	80.00	4467	125.00	61	161.00	280
48.00	3766	81.00	15789	126.00	341	168.00	259
49.00	23064	82.00	3720	128.00	1375	169.00	218
50.00	100512	83.00	138	129.00	727	170.00	869
51.00	30192	84.00	63	130.00	1362	171.00	1076
52.00	1571	86.00	526	131.00	320	172.00	706
55.00	2046	87.00	14408	132.00	117	173.00	4090
56.00	8308	88.00	14217	133.00	57	174.00	355904
57.00	13526	91.00	1465	134.00	316	175.00	28928
58.00	345	92.00	11158	135.00	457	176.00	353280
60.00	3576	93.00	13777	137.00	887	177.00	22216
61.00	19744	94.00	40640	140.00	493	178.00	667
62.00	20528	95.00	312640	141.00	4567	182.00	64
63.00	14793	96.00	21608	142.00	620	207.00	57
64.00	1116	97.00	755	143.00	4904	211.00	4
65.00	236	104.00	2019	145.00	557	215.00	357
66.00	53	105.00	304	146.00	682	281.00	52
67.00	802	106.00	2151	147.00	244	293.00	77
68.00	31624	107.00	422	148.00	1080		
69.00	34328	110.00	235	149.00	171		

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d04bfb.d

Date : 12-DEC-2017 09:40

Client ID: BFB_TUNE

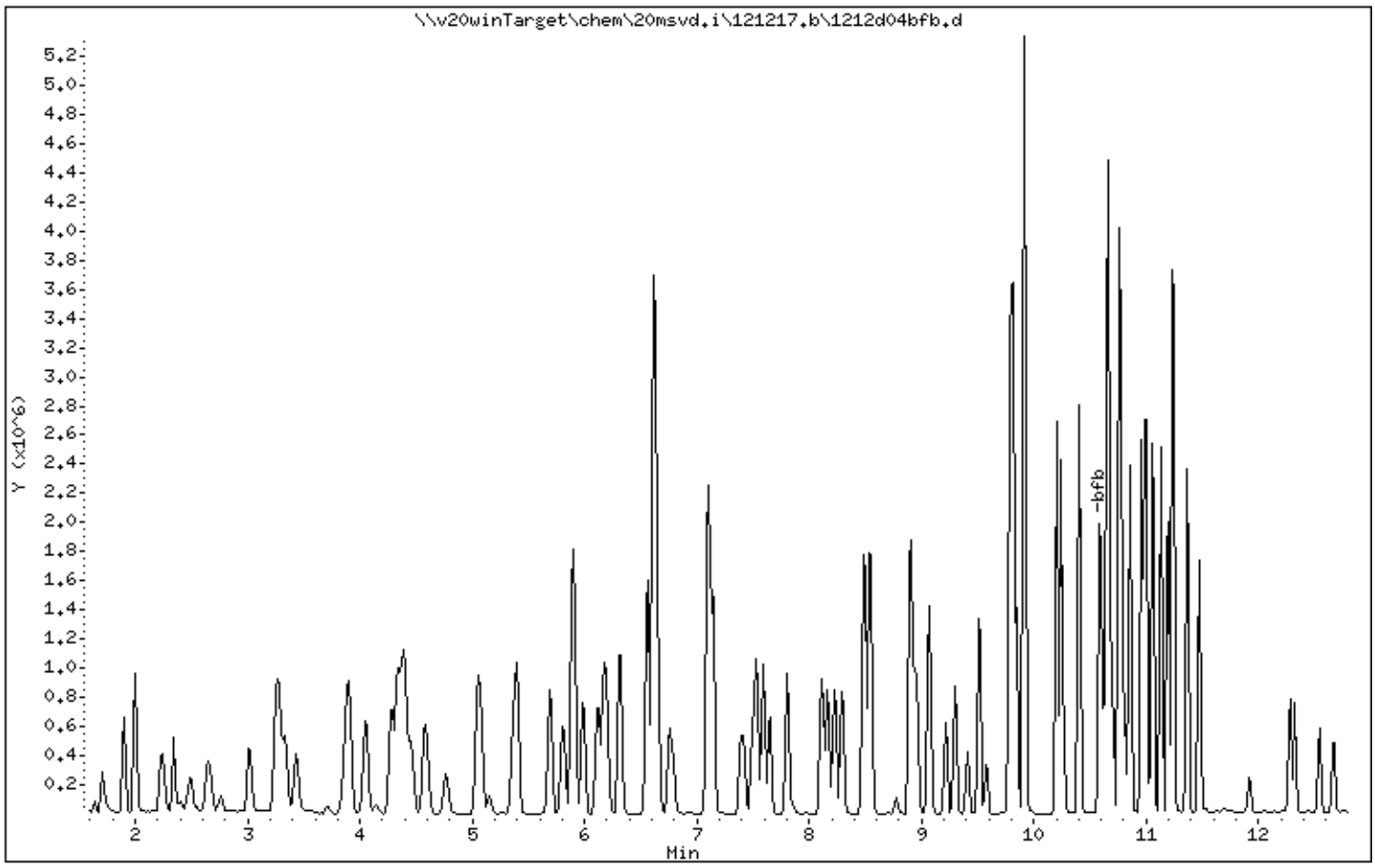
Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX

Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d04bfb.d

Date : 12-DEC-2017 09:40

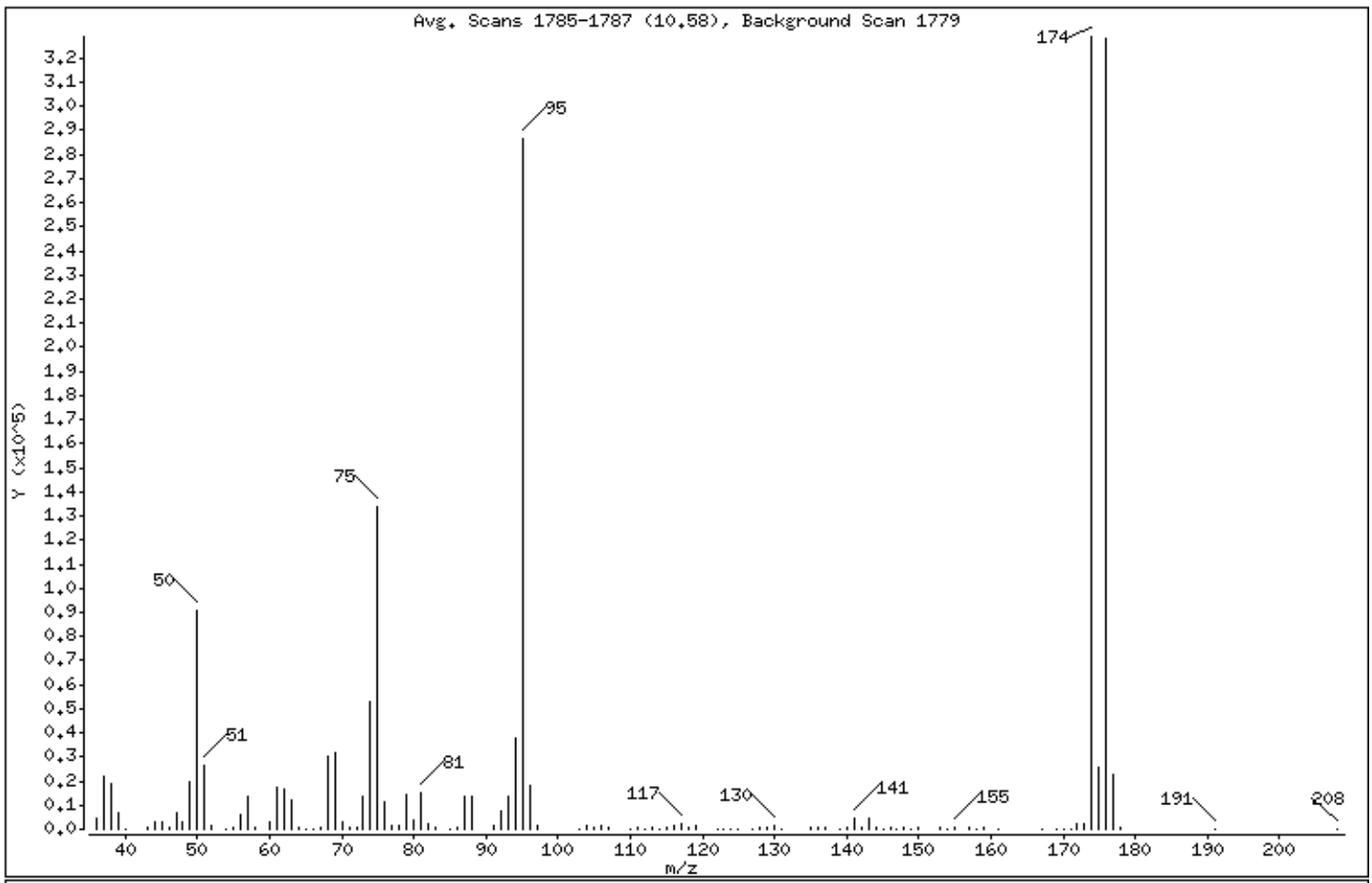
Client ID: BFB_TUNE Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	31.74
75	30.00 - 60.00% of mass 95	46.85
96	5.00 - 9.00% of mass 95	6.43
173	Less than 2.00% of mass 174	0.76 (0.66)
174	50.00 - 120.00% of mass 95	114.86
175	5.00 - 9.00% of mass 174	8.97 (7.81)
176	95.00 - 101.00% of mass 174	114.57 (99.75)
177	5.00 - 9.00% of mass 176	8.04 (7.02)

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d04bfb.d

Date : 12-DEC-2017 09:40

Client ID: BFB_TUNE

Instrument: 20msvd.i

Sample Info: BFB_TUNE,35766:1

Operator: GEM

Column phase: RTX-VMX

Column diameter: 0.25

Data File: 1212d04bfb.d
Spectrum: Avg. Scans 1785-1787 (10.58), Background Scan 1779
Location of Maximum: 174.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4554	69.00	32072	106.00	1446	144.00	614
37.00	21752	70.00	3331	107.00	383	145.00	364
38.00	19184	71.00	887	110.00	334	146.00	538
39.00	6766	72.00	992	111.00	888	147.00	312
40.00	144	73.00	13466	112.00	205	148.00	740
43.00	844	74.00	53032	113.00	573	149.00	233
44.00	3032	75.00	134144	114.00	103	150.00	395
45.00	3329	76.00	11311	115.00	533	153.00	514
46.00	479	77.00	1617	116.00	1609	154.00	116
47.00	6460	78.00	1591	117.00	2449	155.00	987
48.00	2654	79.00	13991	118.00	1123	157.00	806
49.00	19480	80.00	3899	119.00	1610	158.00	320
50.00	90896	81.00	14911	122.00	55	159.00	778
51.00	26600	82.00	2491	123.00	325	161.00	97
52.00	1609	83.00	712	124.00	158	167.00	82
54.00	113	85.00	94	125.00	95	169.00	243
55.00	431	86.00	542	127.00	90	170.00	254
56.00	6113	87.00	13651	128.00	542	171.00	363
57.00	13820	88.00	13890	129.00	398	172.00	1905
58.00	706	91.00	1684	130.00	1336	173.00	2165
60.00	3240	92.00	7592	131.00	280	174.00	328896
61.00	17088	93.00	13525	135.00	588	175.00	25688
62.00	16808	94.00	37432	136.00	421	176.00	328064
63.00	11965	95.00	286336	137.00	475	177.00	23016
64.00	410	96.00	18416	139.00	107	178.00	620
65.00	232	97.00	1231	140.00	491	191.00	62
66.00	65	103.00	125	141.00	4403	208.00	134
67.00	684	104.00	1553	142.00	549		
68.00	30608	105.00	550	143.00	4373		

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received:
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 10:15
Lab Sample ID: 415094
Date Analyzed: 12/12/2017 10:15
Lab File ID: 121217HA.B\1212D06.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	ND	U
	Haloether 229	ND	U
	Haloether 406	ND	U
	Haloether 421	ND	U
	Haloether 427	ND	U
	Haloether 428	ND	U
	Haloether 508	ND	U
	Haloether 528	ND	U
	Halomar	ND	U
	Isoflurane	ND	U
76-38-0	Methoxyflurane	ND	U
	Total Haloether	ND	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received:
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 10:15
Lab Sample ID: 415094
Date Analyzed: 12/12/2017 10:15
Lab File ID: 121217.B\1212D06.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	ND	U
107-02-8	Acrolein	ND	U
107-13-1	Acrylonitrile	ND	U
71-43-2	Benzene	ND	U
75-27-4	Bromodichloromethane	ND	U
75-25-2	Bromoform	ND	U
74-83-9	Bromomethane	ND	U
78-93-3	2-Butanone (MEK)	ND	U
75-15-0	Carbon disulfide	ND	U
56-23-5	Carbon tetrachloride	ND	U
108-90-7	Chlorobenzene	ND	U
75-00-3	Chloroethane	ND	U
67-66-3	Chloroform	ND	U
74-87-3	Chloromethane	ND	U
124-48-1	Dibromochloromethane	ND	U
74-95-3	Dibromomethane	ND	U
75-34-3	1,1-Dichloroethane	ND	U
107-06-2	1,2-Dichloroethane	ND	U
75-35-4	1,1-Dichloroethene	ND	U
156-59-2	cis-1,2-Dichloroethene	ND	U
156-60-5	trans-1,2-Dichloroethene	ND	U
78-87-5	1,2-Dichloropropane	ND	U
10061-01-5	cis-1,3-Dichloropropene	ND	U
10061-02-6	trans-1,3-Dichloropropene	ND	U
100-41-4	Ethylbenzene	ND	U
591-78-6	2-Hexanone	ND	U
75-09-2	Methylene Chloride	ND	U
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	U
100-42-5	Styrene	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	U
127-18-4	Tetrachloroethene	ND	U
108-88-3	Toluene	ND	U
71-55-6	1,1,1-Trichloroethane	ND	U
79-00-5	1,1,2-Trichloroethane	ND	U
79-01-6	Trichloroethene	ND	U
75-69-4	Trichlorofluoromethane	ND	U
96-18-4	1,2,3-Trichloropropane	ND	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received:
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 10:15
Lab Sample ID: 415094
Date Analyzed: 12/12/2017 10:15
Lab File ID: 121217.B\1212D06.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U
75-01-4	Vinyl chloride	ND	U
179601-23-1	m&p-Xylene	ND	U
95-47-6	o-Xylene	ND	U

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d06.d
Lab Smp Id: 415094 Client Smp ID: MB
Inj Date : 12-DEC-2017 10:15
Operator : GEM Inst ID: 20msvd.i
Smp Info : 415094,blk
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						(D
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
7 1,1-Dichloroethene	96	Compound Not Detected.						
8 Carbon disulfide	76	Compound Not Detected.						
9 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
10 Iodomethane	142	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 Allyl chloride	41	Compound Not Detected.						
13 Methylene Chloride	84	Compound Not Detected.						
14 Acetone	43	Compound Not Detected.						(D
15 trans-1,2-Dichloroethene	96	Compound Not Detected.						
16 Methyl Acetate	74	Compound Not Detected.						(D
17 n-Hexane	57	Compound Not Detected.						
18 Methyl-tert-butyl ether	73	Compound Not Detected.						
19 Acetonitrile	41	Compound Not Detected.						(D
20 Chloroprene	53	Compound Not Detected.						
21 1,1-Dichloroethane	63	Compound Not Detected.						
22 Acrylonitrile	53	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	23 Vinyl acetate	43	Compound Not Detected.						
	24 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	25 2,2-Dichloropropane	77	Compound Not Detected.						
	26 Cyclohexane	84	Compound Not Detected.						
	27 Bromochloromethane	128	Compound Not Detected.						
	28 Chloroform	83	Compound Not Detected.						
	29 Carbon tetrachloride	117	Compound Not Detected.						
	30 Tetrahydrofuran	42	Compound Not Detected.						
	31 1,1,1-Trichloroethane	97	Compound Not Detected.						
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	344177	49.2853	49.3	
	33 1,1-Dichloropropene	75	Compound Not Detected.						
	34 2-Butanone (MEK)	43	Compound Not Detected.						
	35 Benzene	78	Compound Not Detected.						
	36 Propionitrile	54	Compound Not Detected.						
	37 Methacrylonitrile	41	Compound Not Detected.						(D
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	317207	50.0000		
	39 1,2-Dichloroethane	62	Compound Not Detected.						
	40 Isobutanol	43	Compound Not Detected.						(D
	41 Methylcyclohexane	83	Compound Not Detected.						
	42 Trichloroethene	130	Compound Not Detected.						
*	43 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1018538	50.0000		
	44 Dibromomethane	93	Compound Not Detected.						
	45 1,2-Dichloropropane	63	Compound Not Detected.						
	46 Bromodichloromethane	83	Compound Not Detected.						
	47 Methyl methacrylate	41	Compound Not Detected.						
	48 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	49 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
	50 cis-1,3-Dichloropropene	75	Compound Not Detected.						
$	51 Toluene-d8 (S)	98	8.489	8.489	(1.188)	1139435	49.9984	50.0	
	52 Toluene	91	Compound Not Detected.						
	53 Tetrachloroethene	164	Compound Not Detected.						
	54 4-Methyl-2-Pentanone	43	Compound Not Detected.						
	55 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	56 Ethyl methacrylate	69	Compound Not Detected.						
	57 1,1,2-Trichloroethane	97	Compound Not Detected.						
	58 Dibromochloromethane	129	Compound Not Detected.						
	59 1,3-Dichloropropane	76	Compound Not Detected.						
	60 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
	61 2-Hexanone	43	Compound Not Detected.						(D
*	62 Chlorobenzene-d5 (IS)	82	9.789	9.788	(1.000)	437007	50.0000		
	63 Chlorobenzene	112	Compound Not Detected.						
	64 Ethylbenzene	91	Compound Not Detected.						
	65 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	66 m&p-Xylene	106	Compound Not Detected.						
	67 o-Xylene	106	Compound Not Detected.						
	68 Styrene	104	Compound Not Detected.						
	69 Bromoform	173	Compound Not Detected.						
	70 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	428768	51.3541	51.4	
	72 trans-1,4-Dichloro-2-butene	88	Compound Not Detected.						(D
	73 Bromobenzene	156	Compound Not Detected.						
	74 n-Propylbenzene	91	Compound Not Detected.						
	75 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D
	76 2-Chlorotoluene	91	Compound Not Detected.						

	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	
	77 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	78 1,2,3-Trichloropropane	110	Compound Not Detected.						(D
	79 4-Chlorotoluene	91	Compound Not Detected.						
	80 tert-Butylbenzene	91	Compound Not Detected.						
	81 Pentachloroethane	167	Compound Not Detected.						
	82 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	83 sec-Butylbenzene	105	Compound Not Detected.						(D
	84 p-Isopropyltoluene	119	Compound Not Detected.						
	85 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	422206	50.0000		
	87 1,4-Dichlorobenzene	146	Compound Not Detected.						
	88 n-Butylbenzene	91	Compound Not Detected.						
	89 1,2-Dichlorobenzene	146	Compound Not Detected.						
	90 1,2-Dibromo-3-chloropropane	157	Compound Not Detected.						(D
	91 Hexachloro-1,3-butadiene	225	12.282	12.282	(1.093)	3640	1.37653	1.38	
	92 1,2,4-Trichlorobenzene	180	12.317	12.322	(1.096)	1612	2.91985	2.92	
	93 Naphthalene	128	Compound Not Detected.						
	94 1,2,3-Trichlorobenzene	180	12.655	12.670	(1.126)	2843	0.88961	0.890	

QC Flag Legend

D - User disabled compound identification.

Pace Analytical Services, Inc.

SW846 8260

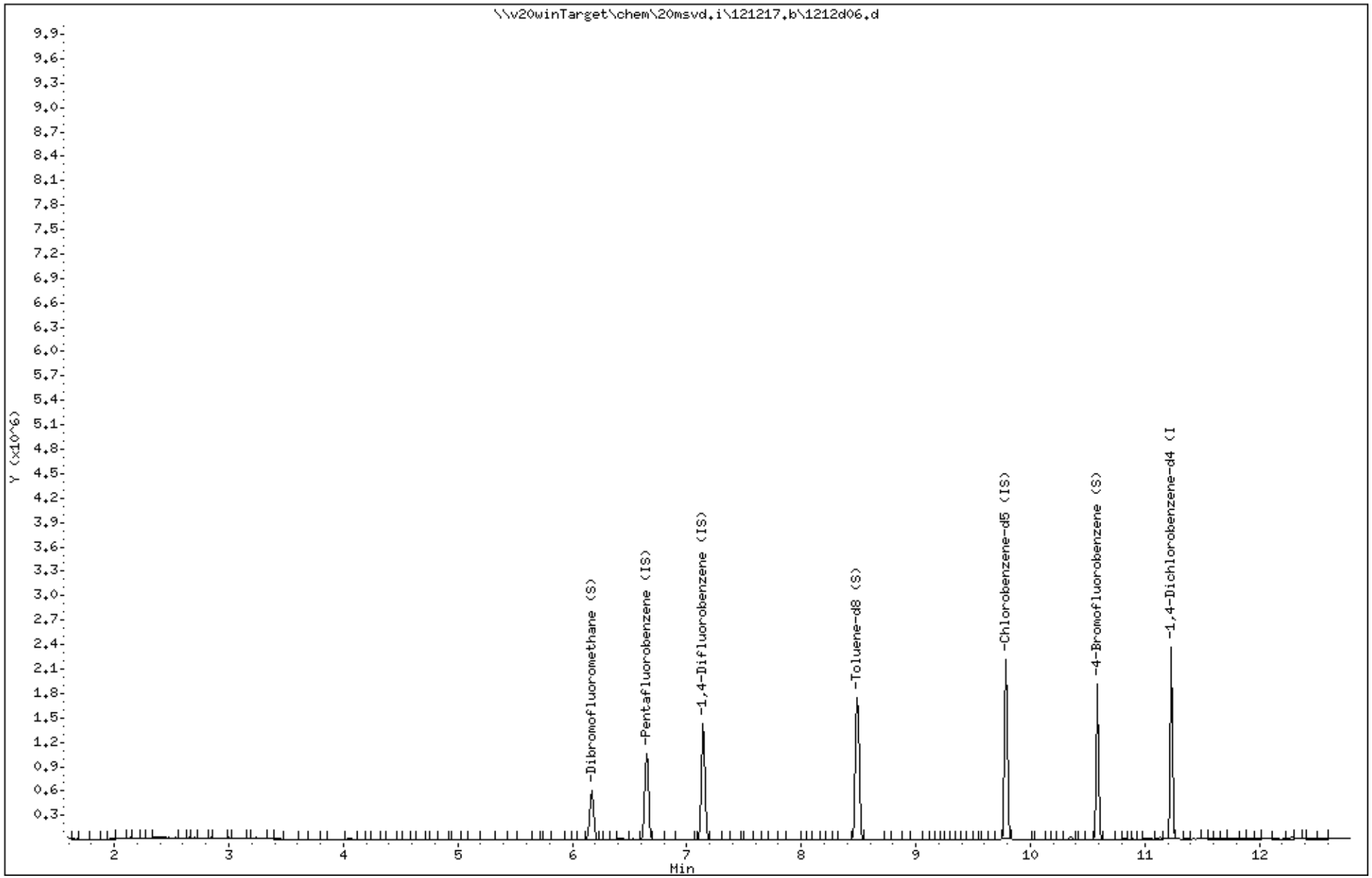
Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d06.d
Lab Smp Id: 415094 Client Smp ID: MB
Inj Date : 12-DEC-2017 10:15
Operator : GEM Inst ID: 20msvd.i
Smp Info : 415094,blk
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	Compound Not Detected.					
2 Haloether 406	85	Compound Not Detected.					
3 Isoflurane	117	Compound Not Detected.					
4 Haloether 508	97	Compound Not Detected.					
5 Enflurane	117	Compound Not Detected.					
6 Halomar	81	Compound Not Detected.					
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	317207	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.144	7.144	(1.000)	1018538	50.0000	
7 Haloether 421	67	Compound Not Detected.					
8 Haloether 427	151	Compound Not Detected.					
11 Haloether 428	117	Compound Not Detected.					
12 Methoxyflurane	81	Compound Not Detected.					
13 Haloether 528	211	Compound Not Detected.					
* 14 Chlorobenzene-d5 (IS)	82	9.789	9.788	(1.000)	437007	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	422206	50.0000	

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d06.d
Date : 12-DEC-2017 10:15
Client ID: MB
Instrument: 20msvd.i
Sample Info: 415094,BLK
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d06.d

Date : 12-DEC-2017 10:15

Client ID: MB

Instrument: 20msvd.i

Sample Info: 415094,BLK

Purge Volume: 5.0

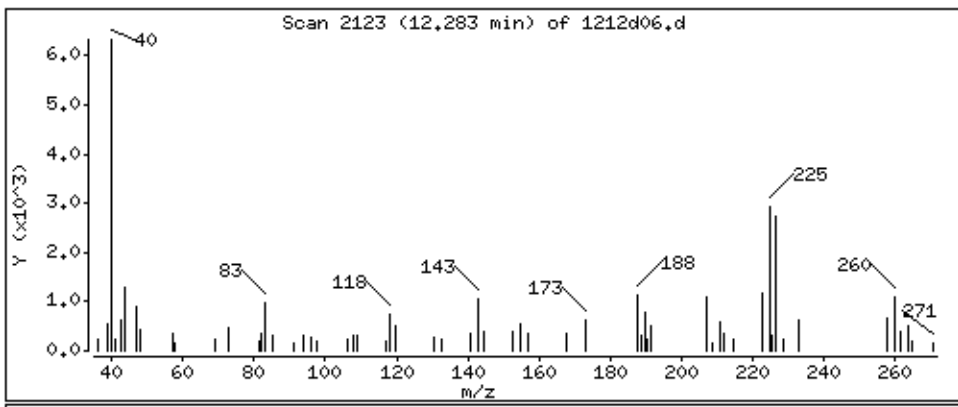
Operator: GEM

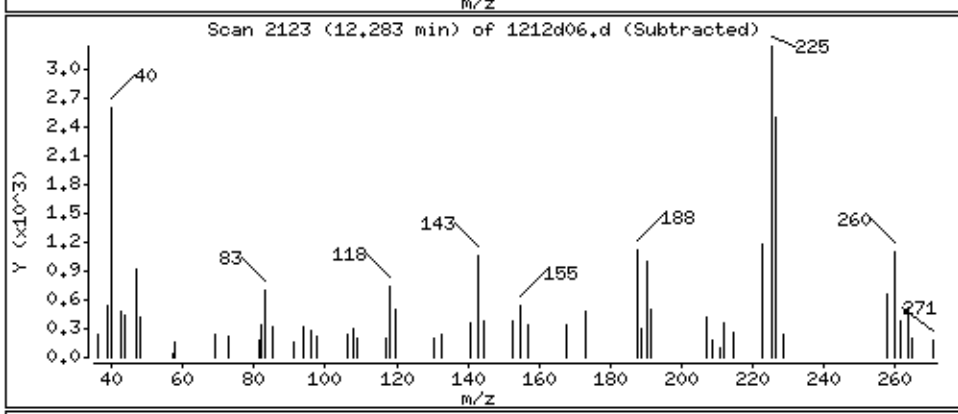
Column phase: RTX VMS 30m

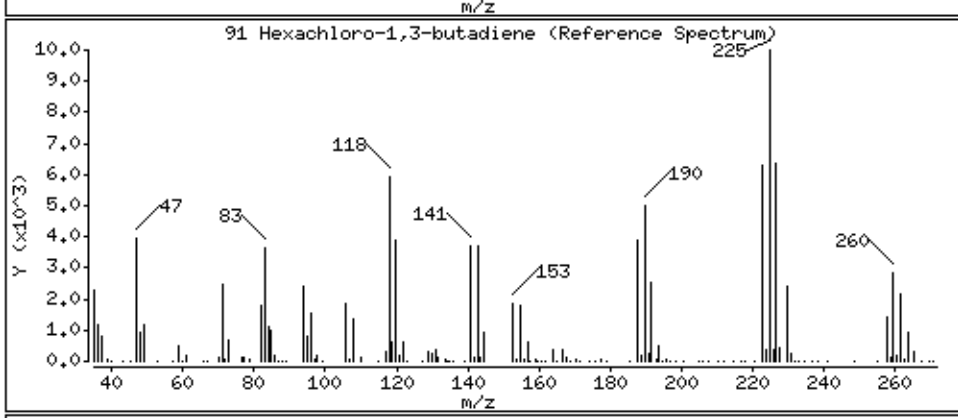
Column diameter: 0.25

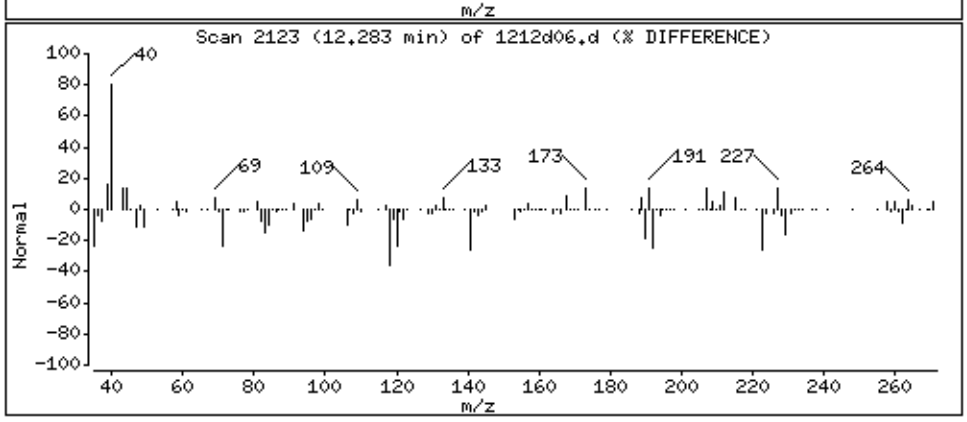
91 Hexachloro-1,3-butadiene

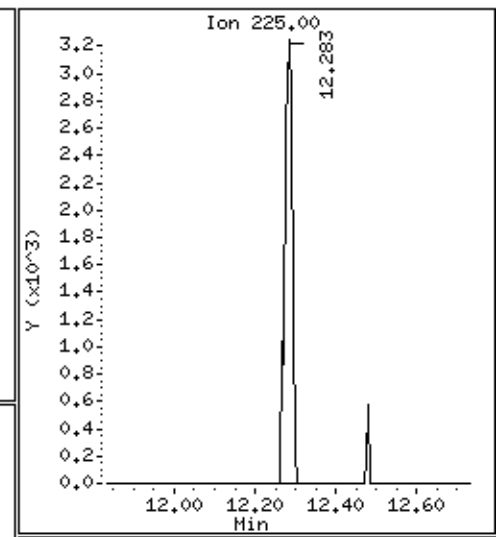
Concentration: 1.38 ug/L

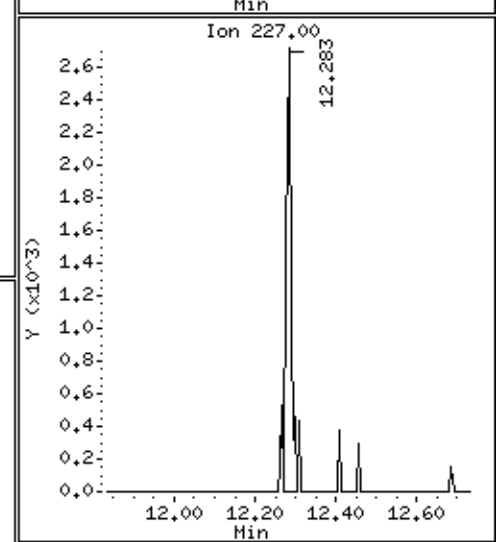












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d06.d

Date : 12-DEC-2017 10:15

Client ID: MB

Instrument: 20msvd.i

Sample Info: 415094,BLK

Purge Volume: 5.0

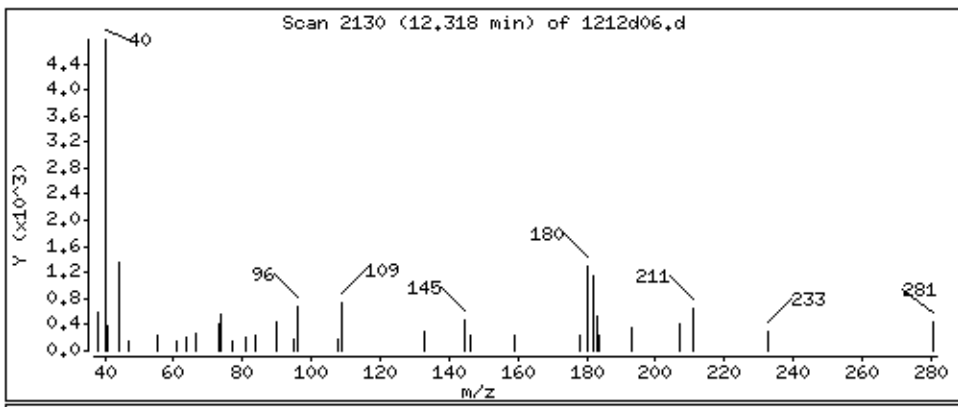
Operator: GEM

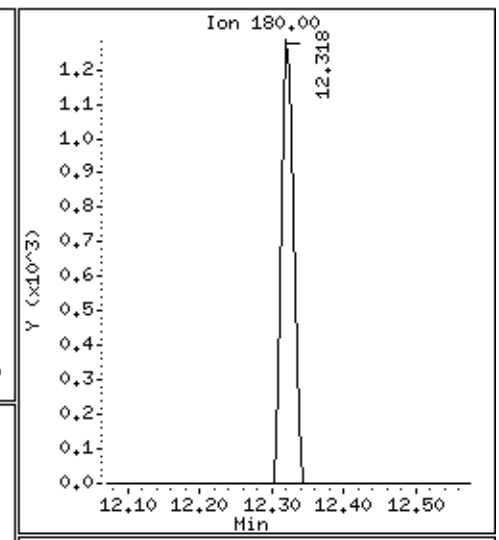
Column phase: RTX VMS 30m

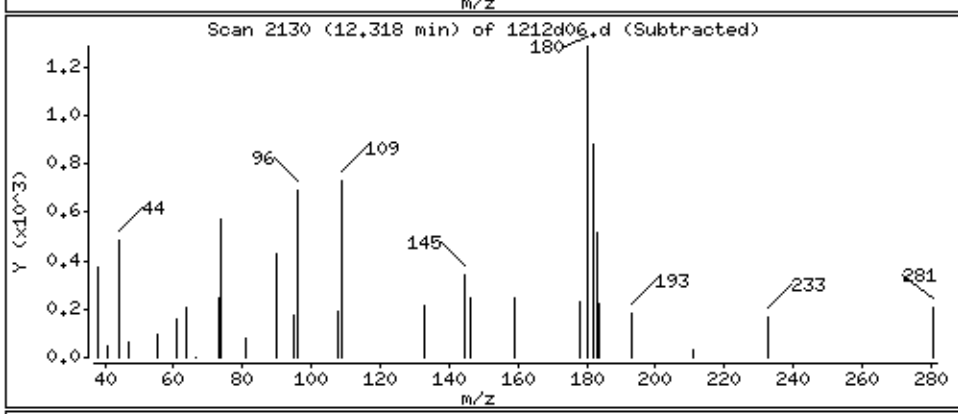
Column diameter: 0.25

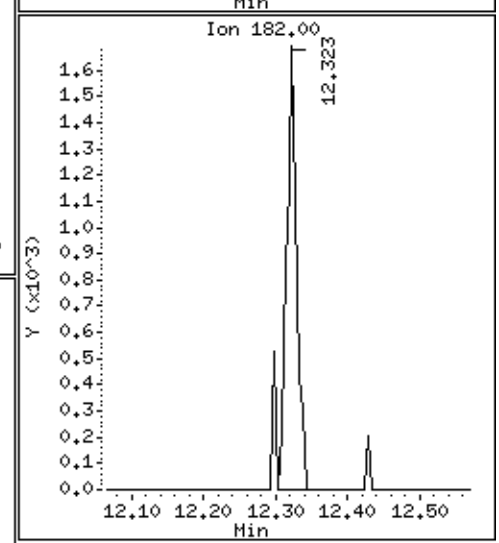
92 1,2,4-Trichlorobenzene

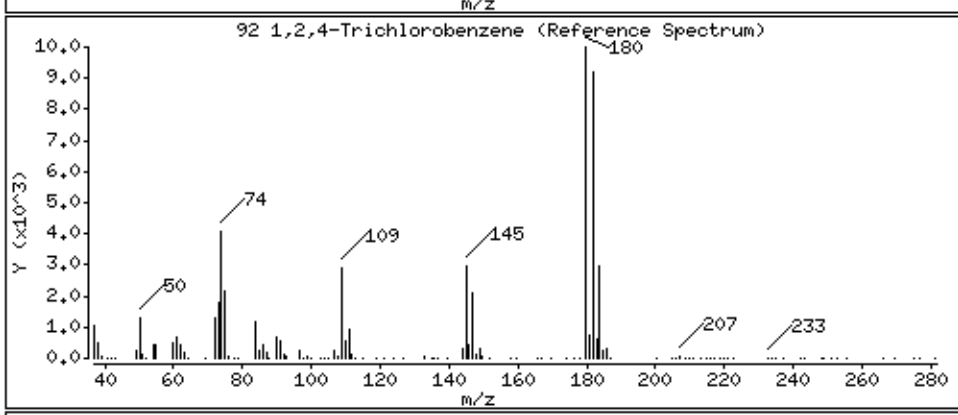
Concentration: 2.92 ug/L

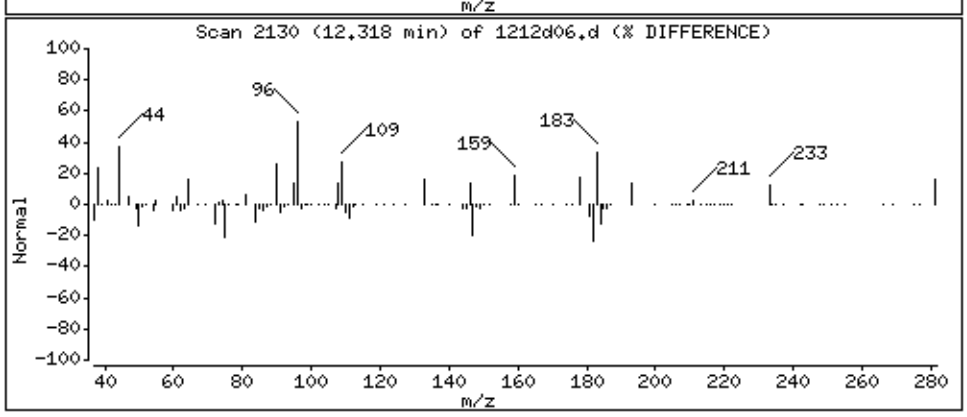












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d06.d

Date : 12-DEC-2017 10:15

Client ID: MB

Instrument: 20msvd.i

Sample Info: 415094,BLK

Purge Volume: 5.0

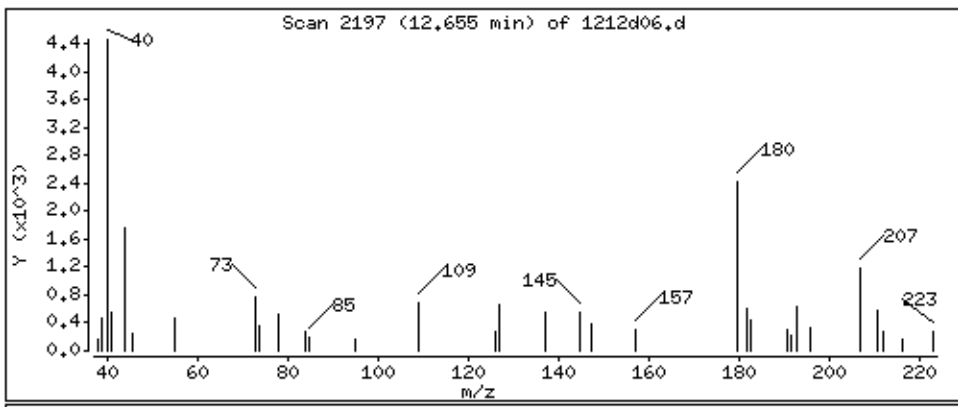
Operator: GEM

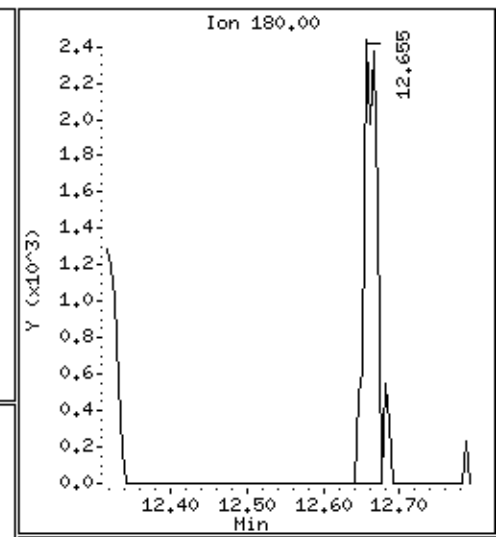
Column phase: RTX VMS 30m

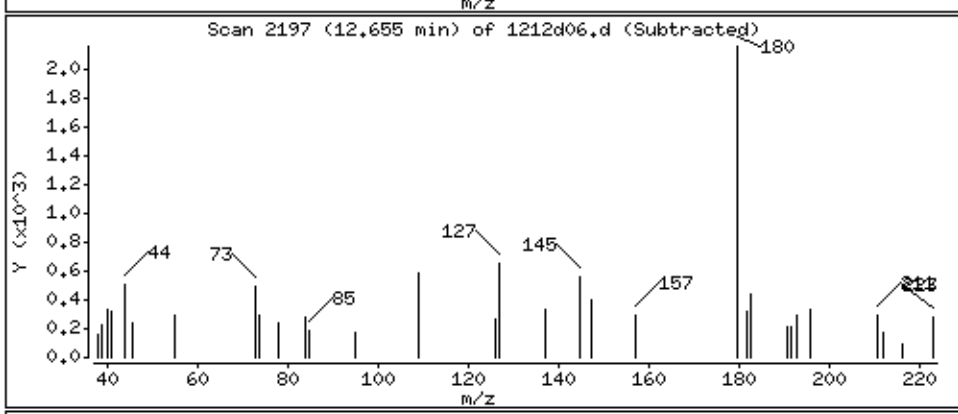
Column diameter: 0.25

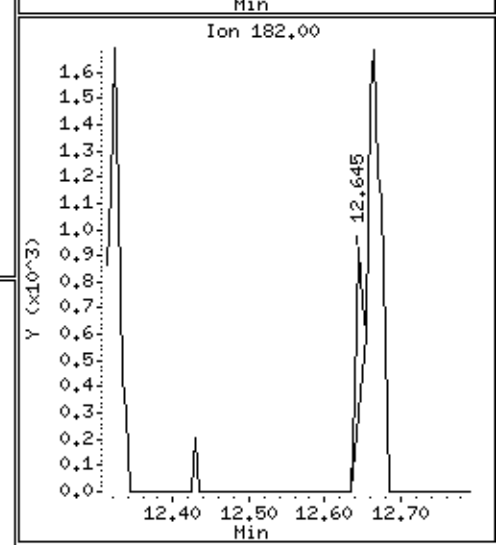
94 1,2,3-Trichlorobenzene

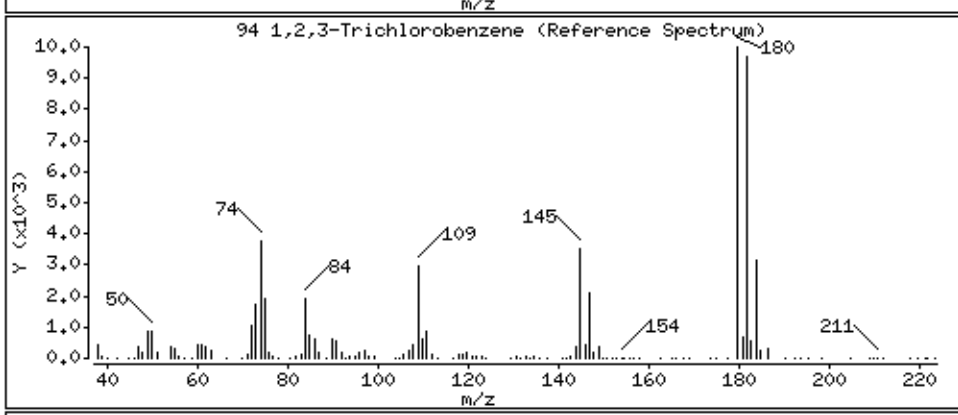
Concentration: 0.890 ug/L

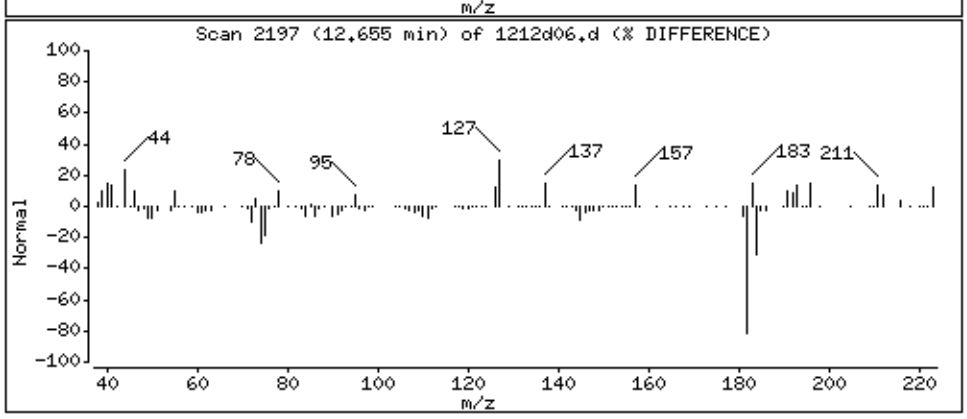






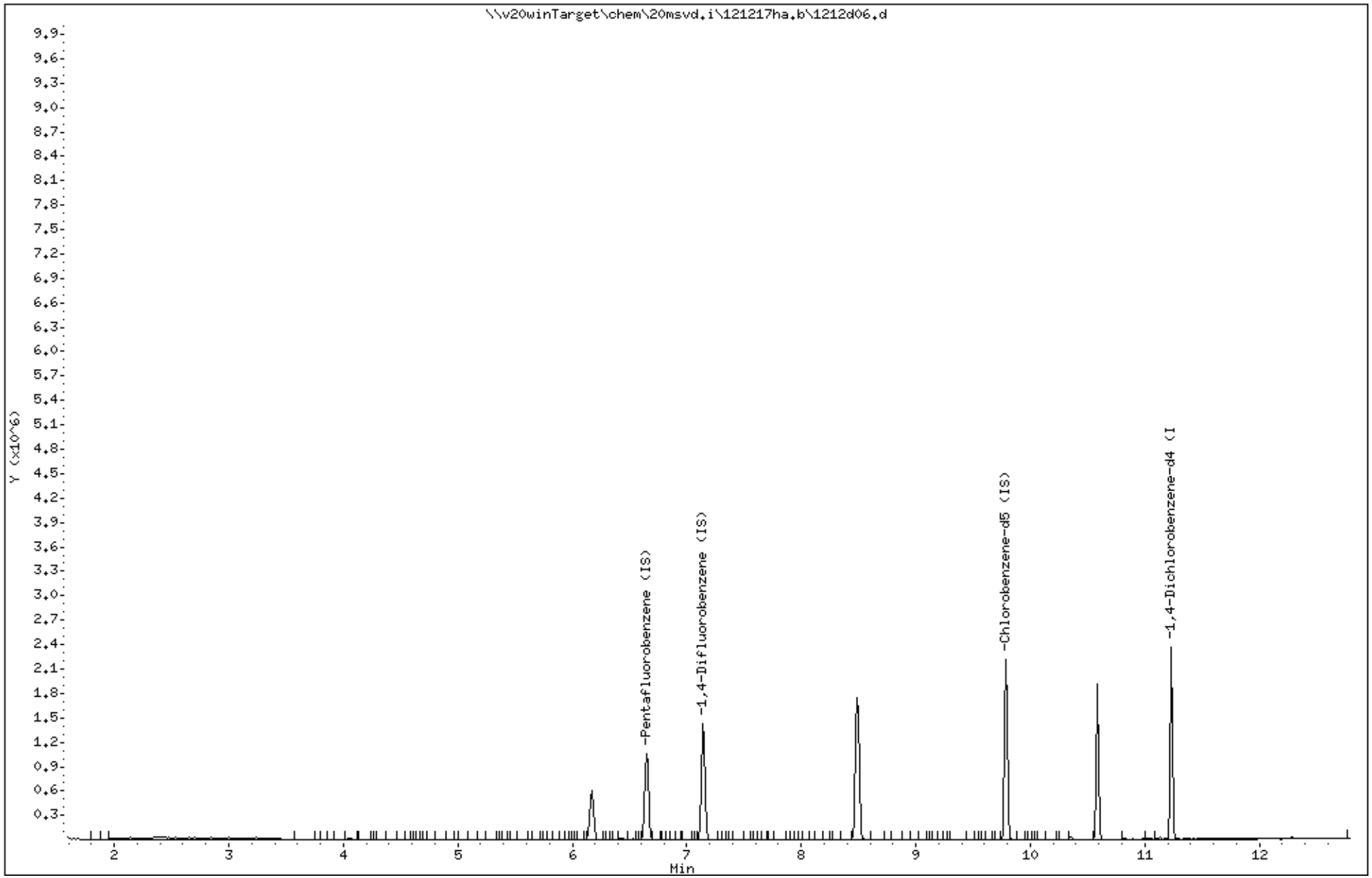






Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d06.d
Injection Date: 12-DEC-2017 10:15
Instrument: 20msvd.i
Lab Sample ID: 415094
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d06.d
Date : 12-DEC-2017 10:15
Client ID: MB
Instrument: 20msvd.i
Sample Info: 415094,BLK
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d06.d
Injection Date: 12-DEC-2017 10:15
Instrument: 20msvd.i
Lab Sample ID: 415094
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received:
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 10:33
Lab Sample ID: 415095
Date Analyzed: 12/12/2017 10:33
Lab File ID: 121217.B\1212D07.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	52.3	
107-02-8	Acrolein	39.1	
107-13-1	Acrylonitrile	41.0	
71-43-2	Benzene	44.9	
75-27-4	Bromodichloromethane	46.2	
75-25-2	Bromoform	42.6	
74-83-9	Bromomethane	45.6	
78-93-3	2-Butanone (MEK)	43.5	
75-15-0	Carbon disulfide	42.1	
56-23-5	Carbon tetrachloride	48.4	
108-90-7	Chlorobenzene	51.2	
75-00-3	Chloroethane	41.1	
67-66-3	Chloroform	46.8	
74-87-3	Chloromethane	41.0	
124-48-1	Dibromochloromethane	44.1	
74-95-3	Dibromomethane	44.4	
75-34-3	1,1-Dichloroethane	47.1	
107-06-2	1,2-Dichloroethane	44.3	
75-35-4	1,1-Dichloroethene	43.9	
156-59-2	cis-1,2-Dichloroethene	43.8	
156-60-5	trans-1,2-Dichloroethene	45.5	
78-87-5	1,2-Dichloropropane	44.5	
10061-01-5	cis-1,3-Dichloropropene	46.8	
10061-02-6	trans-1,3-Dichloropropene	45.5	
100-41-4	Ethylbenzene	49.6	
591-78-6	2-Hexanone	46.5	
75-09-2	Methylene Chloride	44.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	47.5	
100-42-5	Styrene	49.9	
79-34-5	1,1,2,2-Tetrachloroethane	47.4	
127-18-4	Tetrachloroethene	54.5	
108-88-3	Toluene	46.4	
71-55-6	1,1,1-Trichloroethane	45.5	
79-00-5	1,1,2-Trichloroethane	43.3	
79-01-6	Trichloroethene	46.4	
75-69-4	Trichlorofluoromethane	44.6	
96-18-4	1,2,3-Trichloropropane	49.3	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received:
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 10:33
Lab Sample ID: 415095
Date Analyzed: 12/12/2017 10:33
Lab File ID: 121217.B\1212D07.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
76-13-1	1,1,2-Trichlorotrifluoroethane	43.7	
75-01-4	Vinyl chloride	37.3	
179601-23-1	m&p-Xylene	95.4	
95-47-6	o-Xylene	49.4	

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New Orleans
Contract: 2SAR2017
Date Received:
Matrix: Water SDG No.: 2066645
Date Extracted: 12/12/2017 10:33
Lab Sample ID: 415095
Date Analyzed: 12/12/2017 10:33
Lab File ID: 121217HA.B\1212D07.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 20MSVD Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
13838-16-9	Enflurane	49.2	
	Haloether 229	37.0	
	Haloether 406	45.8	
	Haloether 421	45.6	
	Haloether 427	48.8	
	Haloether 428	46.1	
	Haloether 508	46.4	
	Haloether 528	46.6	
	Halomar	45.7	
	Isoflurane	46.4	
76-38-0	Methoxyflurane	43.5	
	Total Haloether	501	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d
Lab Smp Id: 415095 Client Smp ID: MBLCS
Inj Date : 12-DEC-2017 10:33
Operator : GEM Inst ID: 20msvd.i
Smp Info : 415095,spk
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217ha.b\d111717halo.m
Meth Date : 12-Dec-2017 09:55 gmullen Quant Type: ISTD
Cal Date : 17-NOV-2017 10:41 Cal File: 1117d09.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Haloether 229	83	2.237	2.237	(0.336)	206965	37.0467	37.0
2 Haloether 406	85	3.874	3.884	(0.583)	437409	45.7906	45.8
3 Isoflurane	117	4.337	4.333	(0.652)	146445	46.4479	46.4
4 Haloether 508	97	4.357	4.358	(0.655)	134987	46.4204	46.4
5 Enflurane	117	4.584	4.584	(0.689)	317498	49.1889	49.2
6 Halomar	81	5.365	5.365	(0.807)	645464	45.6580	45.6
* 9 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	352171	50.0000	
* 10 1,4-Difluorobenzene (IS)	114	7.143	7.144	(1.000)	1107643	50.0000	
7 Haloether 421	67	7.400	7.400	(1.036)	602736	45.5583	45.6
8 Haloether 427	151	7.526	7.526	(1.054)	455624	48.8191	48.8
11 Haloether 428	117	8.110	8.111	(1.135)	458804	46.0519	46.0
12 Methoxyflurane	81	8.161	8.161	(1.142)	860942	43.4712	43.5
13 Haloether 528	211	9.511	9.511	(1.331)	782927	46.5640	46.6
* 14 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	466168	50.0000	
* 15 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	472305	50.0000	

Pace Analytical Services, Inc.

SW846 8260

Data file : \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d
Lab Smp Id: 415095 Client Smp ID: MBLCS
Inj Date : 12-DEC-2017 10:33
Operator : GEM Inst ID: 20msvd.i
Smp Info : 415095,spk
Misc Info : 7883
Comment : SW846 8260
Method : \\v20winTarget\chem\20msvd.i\121217.b\d120417sim.m
Meth Date : 12-Dec-2017 09:53 gmullen Quant Type: ISTD
Cal Date : 04-DEC-2017 13:02 Cal File: 1204d15.d
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 20VOA2

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Dichlorodifluoromethane	85	1.708	1.703	(0.257)	269294	32.9020	32.9(R)
2 Chloromethane	50	1.899	1.894	(0.286)	563403	41.0087	41.0
3 Vinyl chloride	62	1.995	1.995	(0.300)	483978	37.2877	37.3
4 Bromomethane	94	2.342	2.343	(0.352)	240784	45.6481	45.6
5 Chloroethane	64	2.493	2.494	(0.375)	236296	41.0636	41.1
6 Trichlorofluoromethane	101	2.650	2.650	(0.399)	466686	44.6267	44.6
7 1,1-Dichloroethene	96	3.249	3.254	(0.489)	266387	43.9042	43.9
8 Carbon disulfide	76	3.274	3.280	(0.492)	841298	42.1156	42.1
9 1,1,2-Trichlorotrifluoroethane	101	3.330	3.330	(0.501)	300247	43.6795	43.7
10 Iodomethane	142	3.430	3.431	(0.516)	595695	45.9234	45.9
11 Acrolein	56	3.718	3.723	(0.559)	50623	39.0732	39.1(R)
12 Allyl chloride	41	3.894	3.899	(0.586)	634182	45.0683	45.1
13 Methylene Chloride	84	4.050	4.045	(0.609)	295238	44.0122	44.0
14 Acetone	43	4.146	4.146	(0.624)	91386	52.3374	52.3
15 trans-1,2-Dichloroethene	96	4.277	4.277	(0.643)	301960	45.5489	45.5
16 Methyl Acetate	74	4.327	4.333	(0.651)	29705	42.1081	42.1(M)
17 n-Hexane	57	4.393	4.393	(0.661)	644707	45.8491	45.8
18 Methyl-tert-butyl ether	73	4.448	4.453	(0.669)	550983	42.6964	42.7
19 Acetonitrile	41	4.765	4.766	(0.717)	341213	402.232	402
20 Chloroprene	53	5.043	5.048	(0.758)	662771	46.7943	46.8
21 1,1-Dichloroethane	63	5.073	5.073	(0.763)	727218	47.0748	47.1
22 Acrylonitrile	53	5.148	5.149	(0.774)	108485	40.9514	41.0

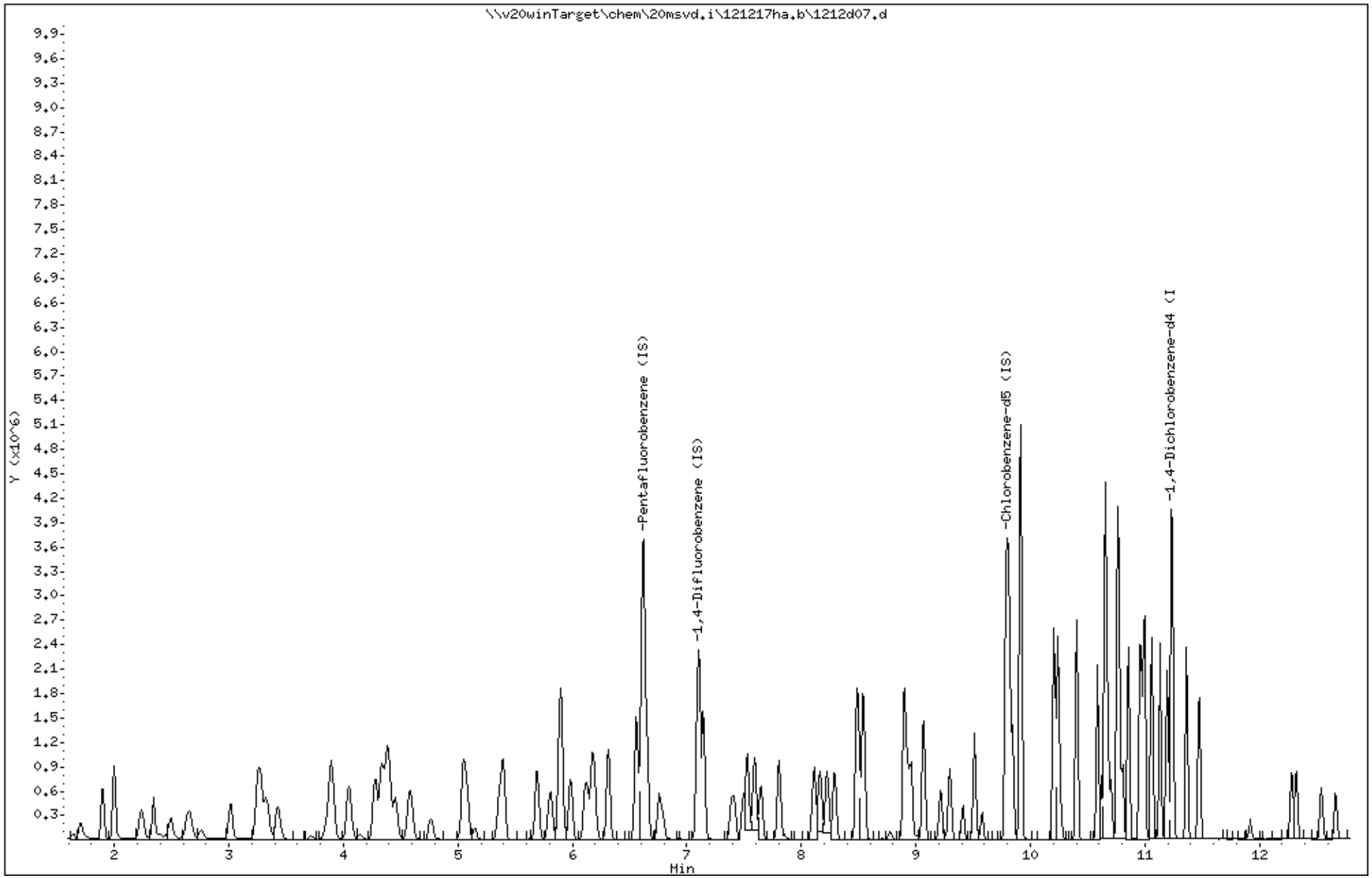
	Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	23 Vinyl acetate	43	5.395	5.395	(0.811)	1504167	42.7681	42.8
	24 cis-1,2-Dichloroethene	96	5.692	5.693	(0.856)	331758	43.7801	43.8
	25 2,2-Dichloropropane	77	5.813	5.809	(0.874)	377850	47.1350	47.1
	26 Cyclohexane	84	5.899	5.894	(0.887)	407428	44.9101	44.9
	27 Bromochloromethane	128	5.899	5.904	(0.887)	158584	44.0536	44.0
	28 Chloroform	83	5.985	5.985	(0.900)	536752	46.8487	46.8
	29 Carbon tetrachloride	117	6.116	6.116	(0.856)	424501	48.3998	48.4
	30 Tetrahydrofuran	42	6.156	6.151	(0.926)	109623	43.0748	43.1
	31 1,1,1-Trichloroethane	97	6.191	6.191	(0.931)	462957	45.5435	45.5
$	32 Dibromofluoromethane (S)	113	6.171	6.171	(0.928)	369379	47.6427	47.6
	33 1,1-Dichloropropene	75	6.312	6.312	(0.884)	417398	46.3198	46.3
	34 2-Butanone (MEK)	43	6.317	6.317	(0.950)	136211	43.4801	43.5
	35 Benzene	78	6.559	6.559	(0.918)	1128393	44.9304	44.9
	36 Propionitrile	54	6.599	6.600	(0.992)	390884	422.586	422
	37 Methacrylonitrile	41	6.619	6.620	(0.995)	1893516	435.842	436(R)
*	38 Pentafluorobenzene (IS)	99	6.650	6.645	(1.000)	352171	50.0000	
	39 1,2-Dichloroethane	62	6.755	6.756	(0.946)	411935	44.2843	44.3
	40 Isobutanol	43	6.786	6.786	(1.020)	225658	875.967	876
	41 Methylcyclohexane	83	7.098	7.098	(0.994)	468200	49.0764	49.1
	42 Trichloroethene	130	7.108	7.108	(0.995)	353952	46.4332	46.4
*	43 1,4-Difluorobenzene (IS)	114	7.143	7.144	(1.000)	1107643	50.0000	
	44 Dibromomethane	93	7.491	7.491	(1.049)	173922	44.3703	44.4
	45 1,2-Dichloropropane	63	7.592	7.592	(1.063)	380502	44.5405	44.5
	46 Bromodichloromethane	83	7.647	7.647	(1.071)	370363	46.1608	46.2
	47 Methyl methacrylate	41	7.803	7.804	(1.092)	554066	88.3884	88.4
	48 1,4-Dioxane (p-Dioxane)	88	7.854	7.849	(1.099)	29946	769.497	769
	49 2-Chloroethyl vinyl ether	63	8.221	8.227	(1.151)	385102	90.0577	90.0
	50 cis-1,3-Dichloropropene	75	8.292	8.292	(1.161)	434116	46.8119	46.8
$	51 Toluene-d8 (S)	98	8.488	8.489	(1.188)	1194279	48.1892	48.2
	52 Toluene	91	8.539	8.539	(1.195)	1217464	46.3524	46.4
	53 Tetrachloroethene	164	8.901	8.897	(0.909)	336977	54.5060	54.5
	54 4-Methyl-2-Pentanone	43	8.901	8.907	(0.909)	274941	47.4890	47.5
	55 trans-1,3-Dichloropropene	75	8.927	8.927	(1.250)	352225	45.5097	45.5
	56 Ethyl methacrylate	69	9.063	9.068	(1.269)	244667	47.0485	47.0
	57 1,1,2-Trichloroethane	97	9.068	9.068	(1.269)	209884	43.3444	43.3
	58 Dibromochloromethane	129	9.214	9.214	(0.941)	262229	44.1166	44.1
	59 1,3-Dichloropropane	76	9.299	9.300	(0.950)	342866	47.6877	47.7
	60 1,2-Dibromoethane (EDB)	107	9.410	9.411	(1.317)	213652	41.8943	41.9
	61 2-Hexanone	43	9.576	9.577	(0.978)	185506	46.5294	46.5
*	62 Chlorobenzene-d5 (IS)	82	9.788	9.788	(1.000)	466168	50.0000	
	63 Chlorobenzene	112	9.798	9.798	(1.001)	832228	51.1834	51.2
	64 Ethylbenzene	91	9.813	9.814	(1.003)	1360246	49.6187	49.6
	65 1,1,1,2-Tetrachloroethane	131	9.843	9.844	(1.006)	290110	49.4439	49.4
	66 m&p-Xylene	106	9.914	9.914	(1.013)	1008278	95.3879	95.4
	67 o-Xylene	106	10.206	10.206	(1.043)	484289	49.4341	49.4
	68 Styrene	104	10.241	10.242	(1.046)	796106	49.9178	49.9
	69 Bromoform	173	10.262	10.262	(1.048)	180519	42.6049	42.6
	70 Isopropylbenzene (Cumene)	105	10.403	10.403	(0.926)	1238101	49.4476	49.4
$	71 4-Bromofluorobenzene (S)	176	10.584	10.584	(0.942)	467853	50.0915	50.1
	72 trans-1,4-Dichloro-2-butene	88	10.624	10.625	(0.946)	106131	70.9015	70.9
	73 Bromobenzene	156	10.655	10.655	(0.948)	377770	53.3387	53.3
	74 n-Propylbenzene	91	10.660	10.655	(0.949)	1425969	49.1550	49.2
	75 1,1,2,2-Tetrachloroethane	83	10.700	10.700	(0.952)	244280	47.3547	47.4
	76 2-Chlorotoluene	91	10.760	10.761	(0.958)	897793	51.1385	51.1

Compounds	QUANT SIG DET	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
77 1,3,5-Trimethylbenzene	105	10.770	10.766	(0.959)	926624	50.5646	50.6
78 1,2,3-Trichloropropane	110	10.791	10.791	(0.961)	66936	49.2872	49.3
79 4-Chlorotoluene	91	10.856	10.856	(0.966)	811285	50.2296	50.2
80 tert-Butylbenzene	91	10.962	10.957	(0.976)	492944	49.7555	49.8
81 Pentachloroethane	167	10.982	10.982	(0.978)	204004	48.9857	49.0
82 1,2,4-Trimethylbenzene	105	10.997	10.997	(0.979)	918817	50.9890	51.0
83 sec-Butylbenzene	105	11.058	11.058	(0.984)	1142588	49.4231	49.4
84 p-Isopropyltoluene	119	11.133	11.133	(0.991)	896416	48.0867	48.1
85 1,3-Dichlorobenzene	146	11.194	11.194	(0.996)	583150	51.6948	51.7
* 86 1,4-Dichlorobenzene-d4 (IS)	152	11.234	11.234	(1.000)	472305	50.0000	
87 1,4-Dichlorobenzene	146	11.239	11.239	(1.000)	574904	50.2713	50.3
88 n-Butylbenzene	91	11.365	11.365	(1.012)	827561	49.9745	50.0
89 1,2-Dichlorobenzene	146	11.476	11.476	(1.022)	501108	50.7918	50.8
90 1,2-Dibromo-3-chloropropane	157	11.922	11.922	(1.061)	71040	44.7268	44.7
91 Hexachloro-1,3-butadiene	225	12.282	12.282	(1.093)	138118	46.6915	46.7
92 1,2,4-Trichlorobenzene	180	12.322	12.322	(1.097)	228008	44.1925	44.2
93 Naphthalene	128	12.544	12.539	(1.117)	409124	47.9454	47.9
94 1,2,3-Trichlorobenzene	180	12.665	12.670	(1.127)	158251	44.2660	44.3

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d
Date : 12-DEC-2017 10:33
Client ID: MBLCS
Instrument: 20msvd.i
Sample Info: 415095,SPK
Purge Volume: 5.0
Operator: GEM
Column phase: DB-624
Column diameter: 0.18



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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

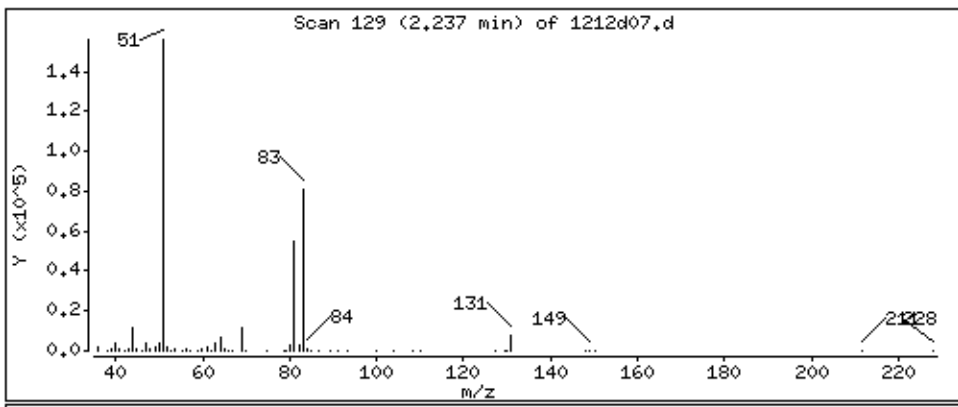
Operator: GEM

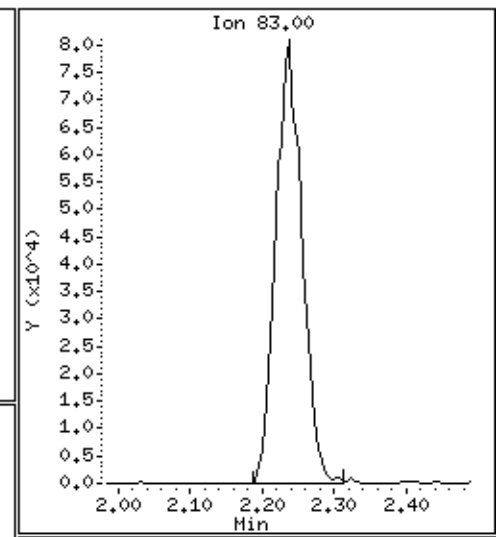
Column phase: DB-624

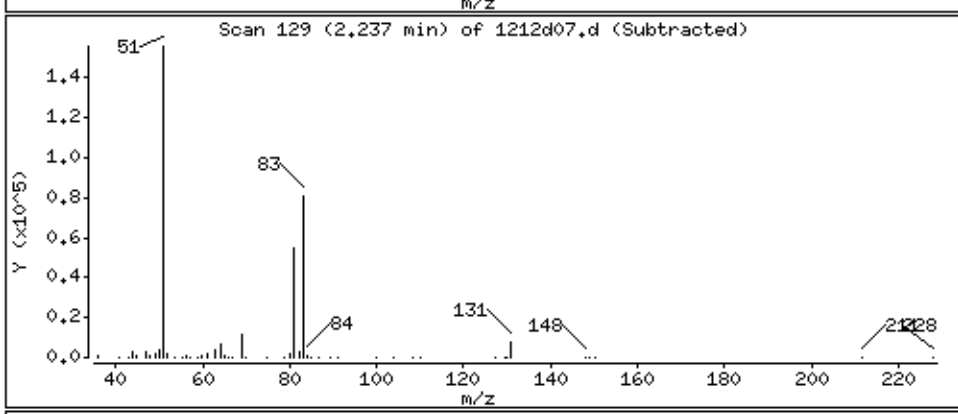
Column diameter: 0.18

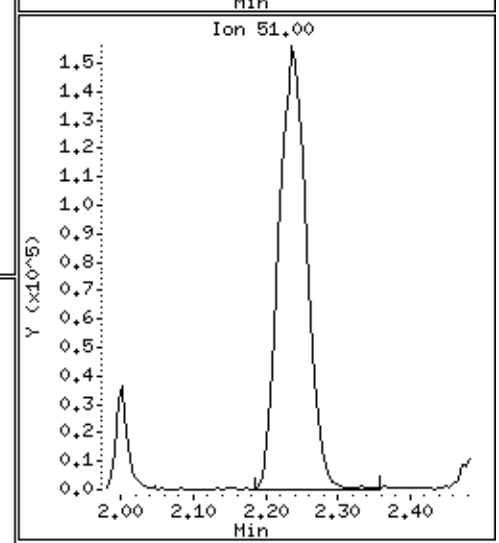
1 Haloether 229

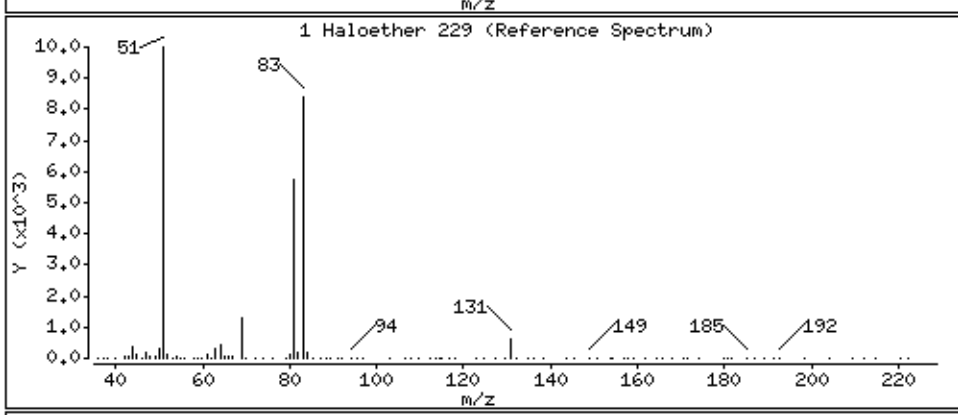
Concentration: 37.0 ug/L

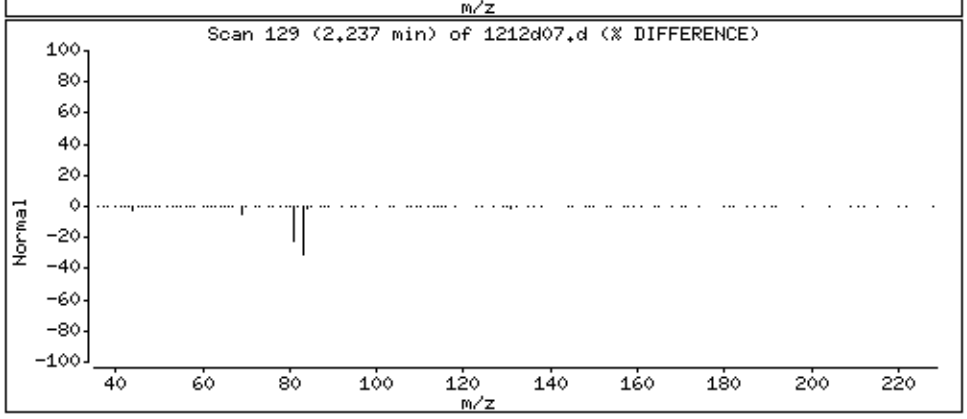












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

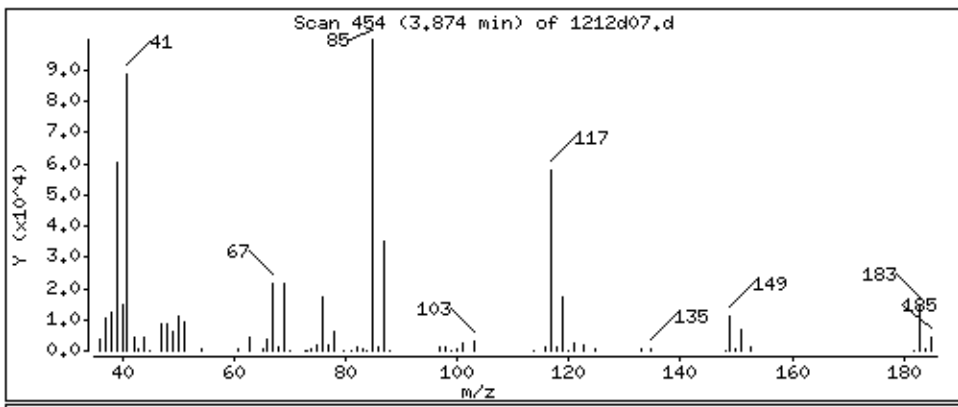
Operator: GEM

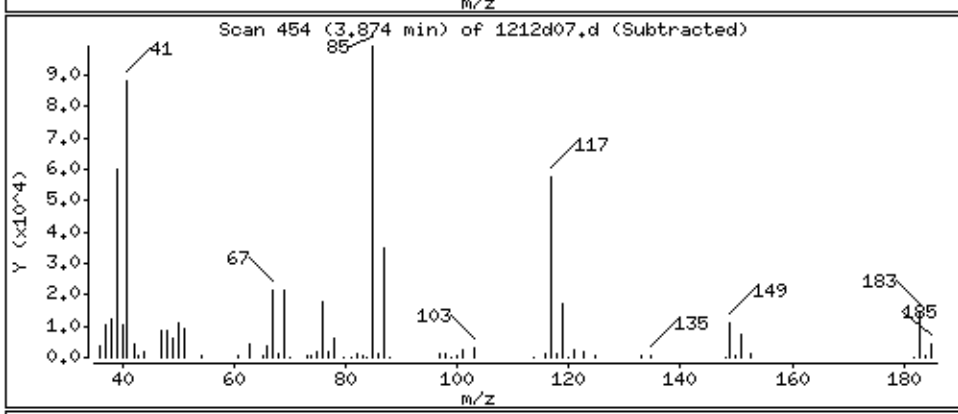
Column phase: DB-624

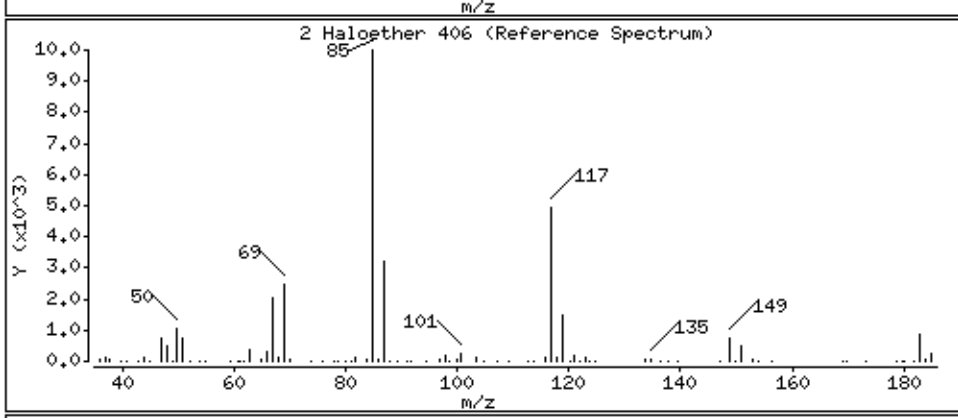
Column diameter: 0.18

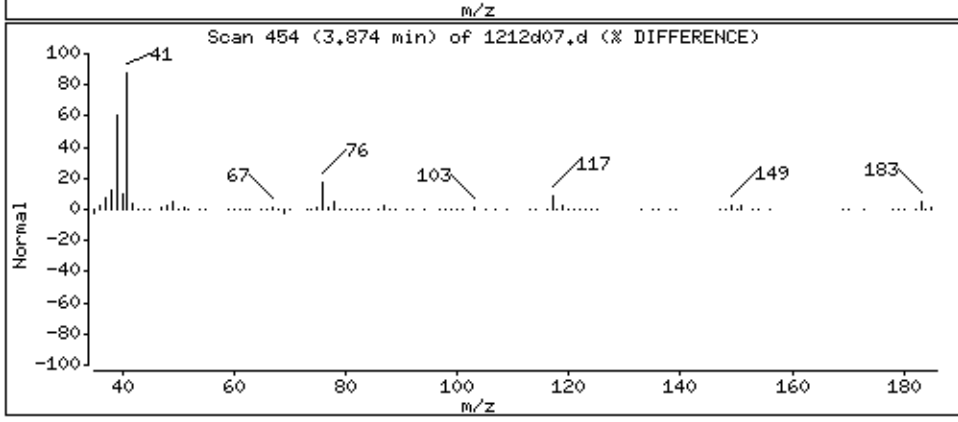
2 Haloether 406

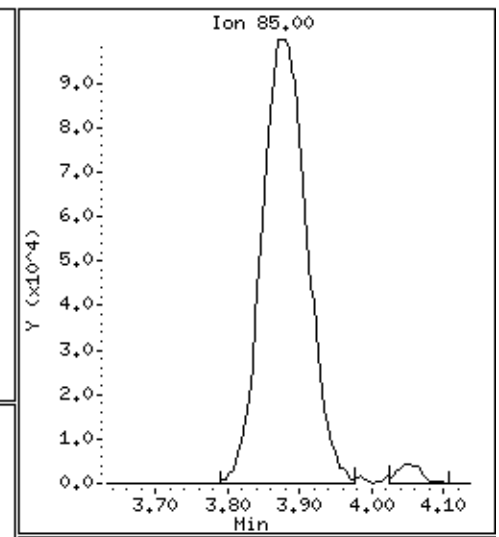
Concentration: 45.8 ug/L

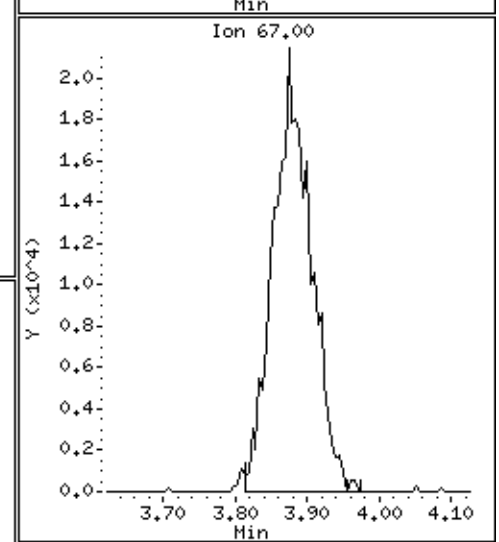


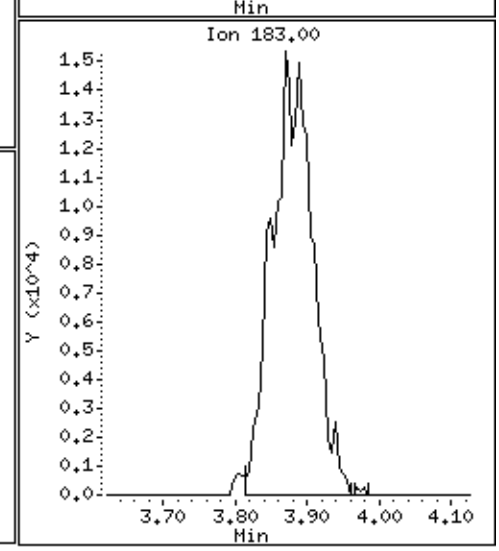












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

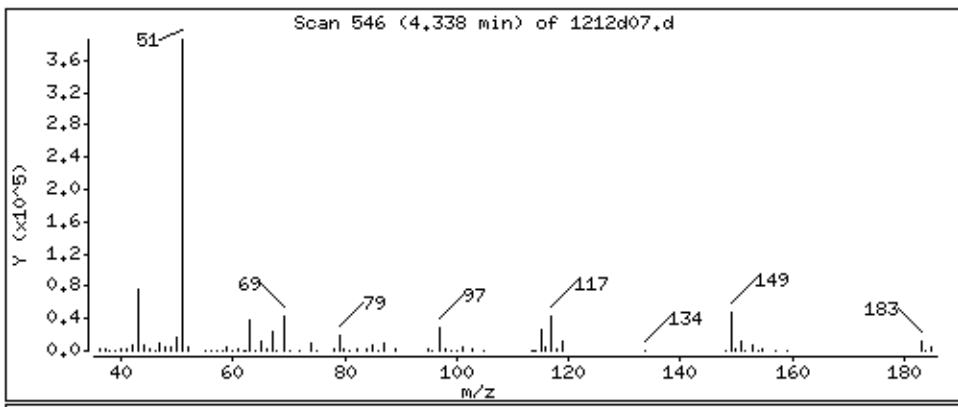
Operator: GEM

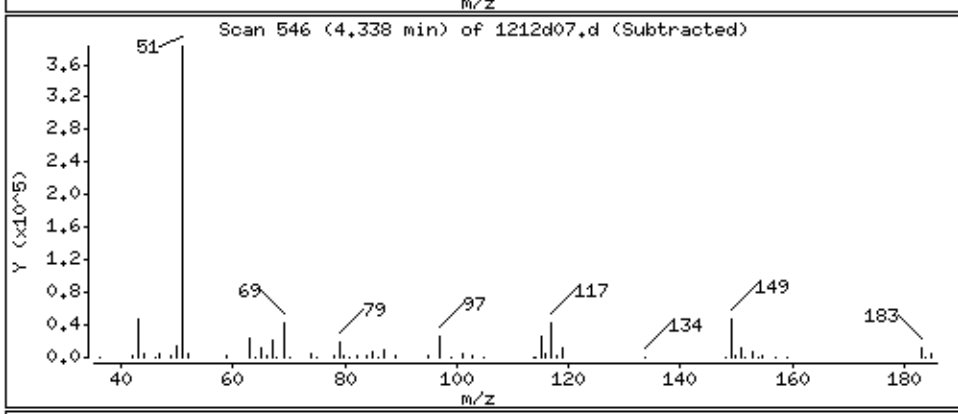
Column phase: DB-624

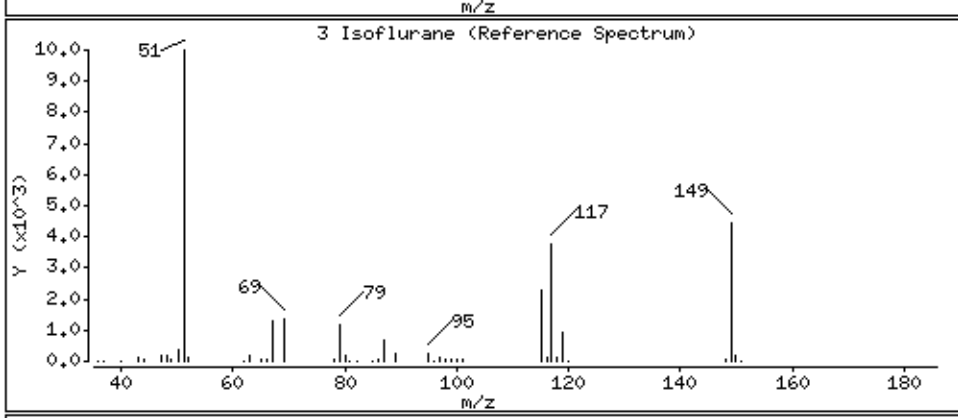
Column diameter: 0.18

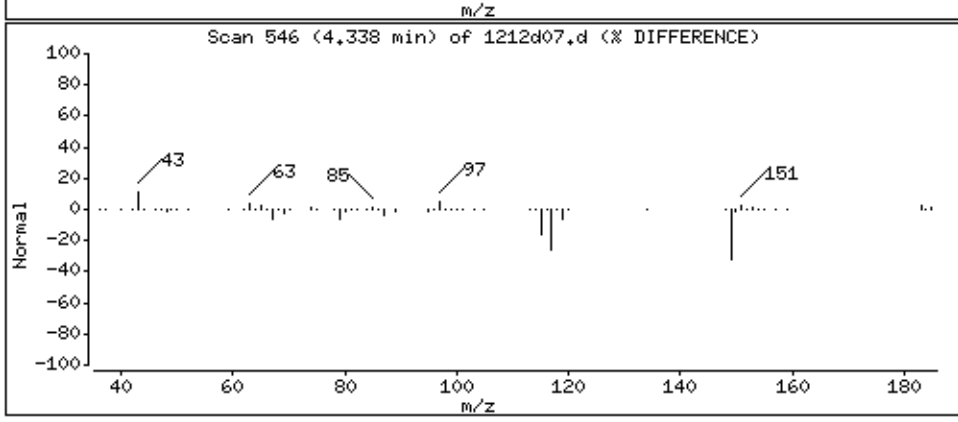
3 Isoflurane

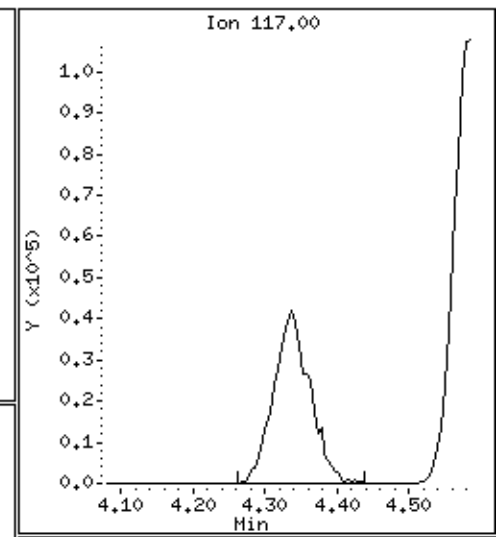
Concentration: 46.4 ug/L

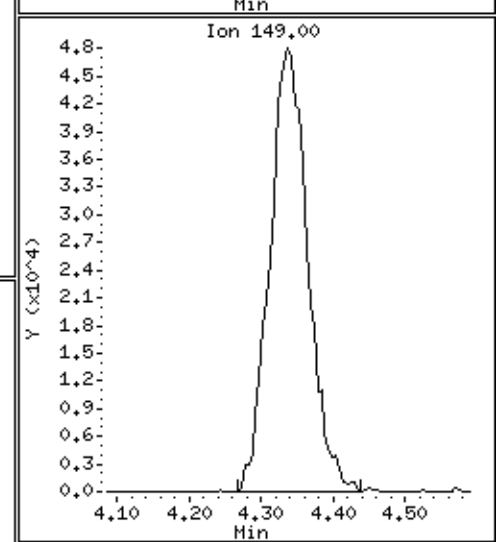


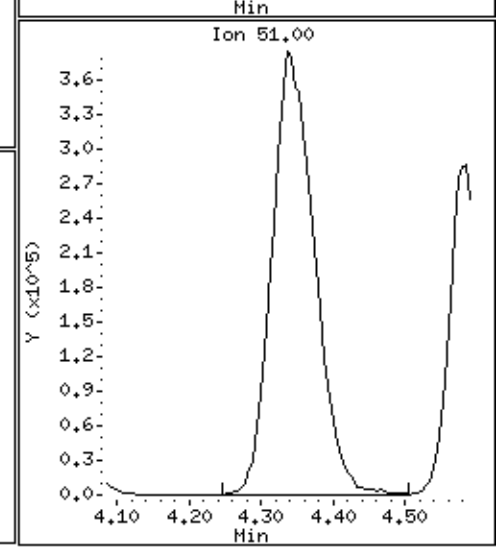












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

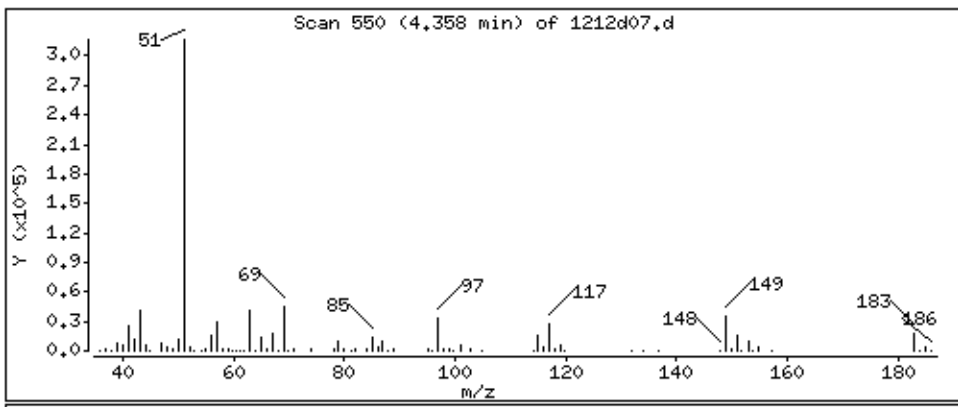
Operator: GEM

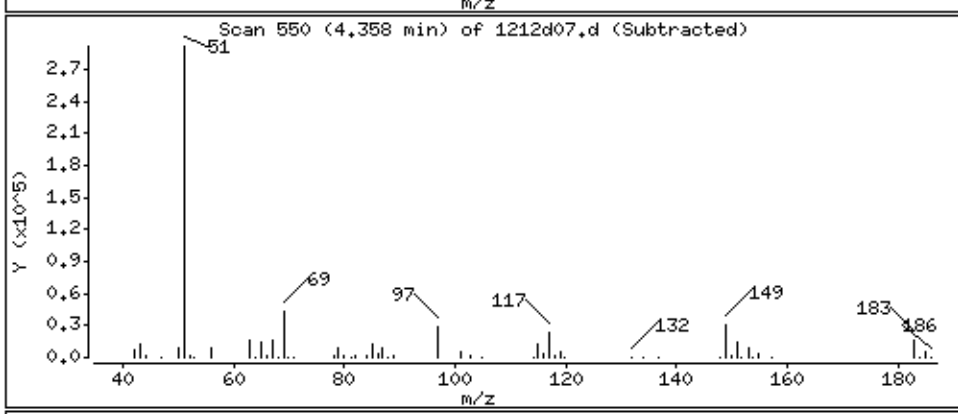
Column phase: DB-624

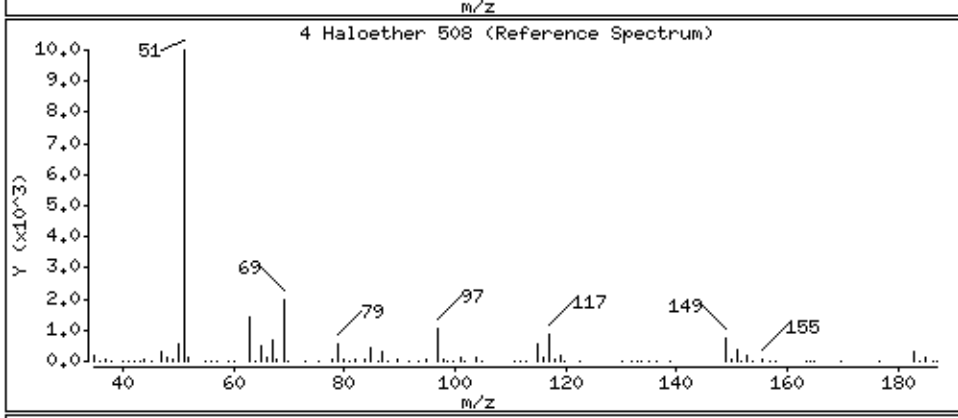
Column diameter: 0.18

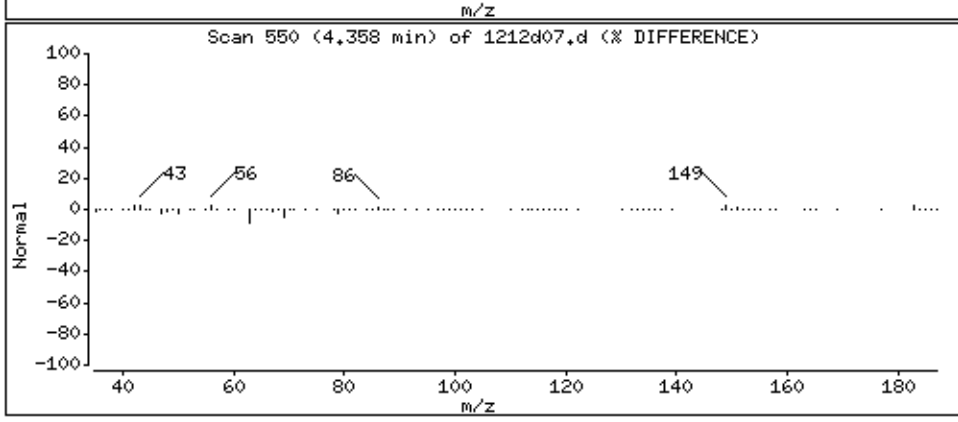
4 Haloether 508

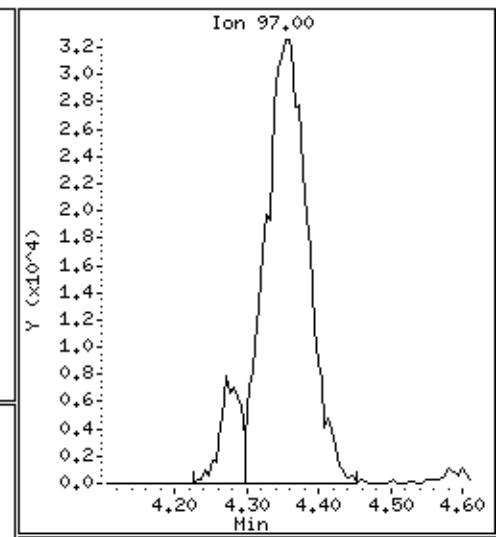
Concentration: 46.4 ug/L

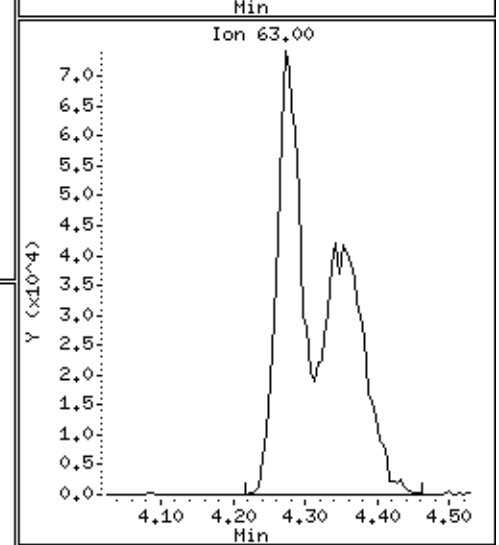


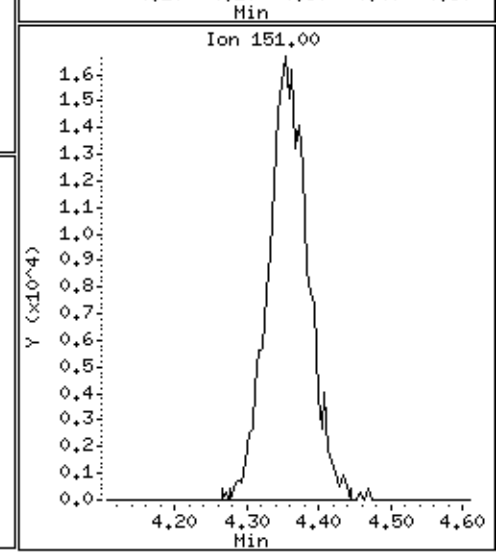












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

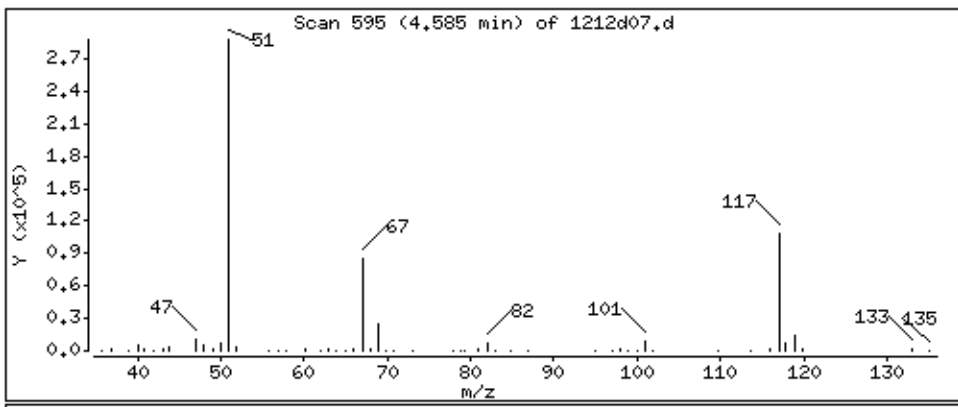
Operator: GEM

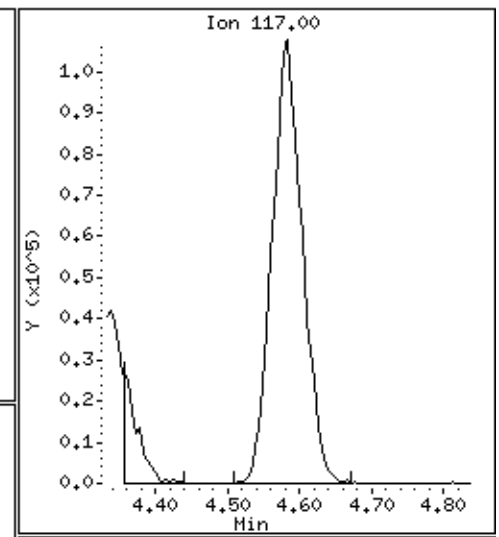
Column phase: DB-624

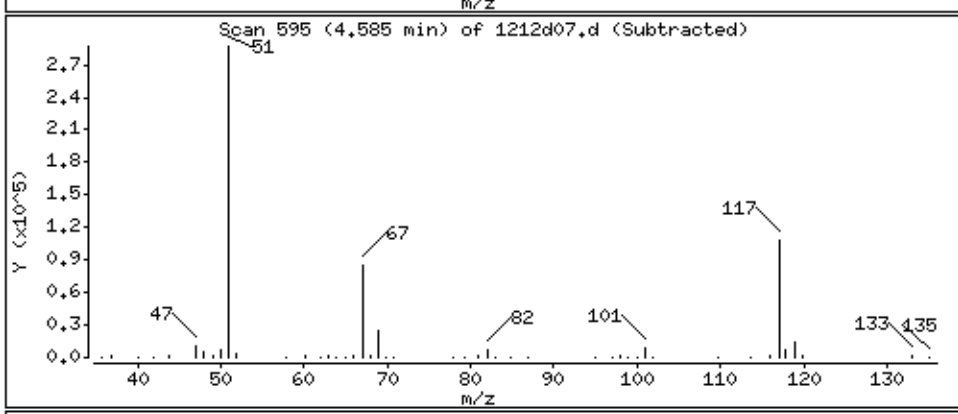
Column diameter: 0.18

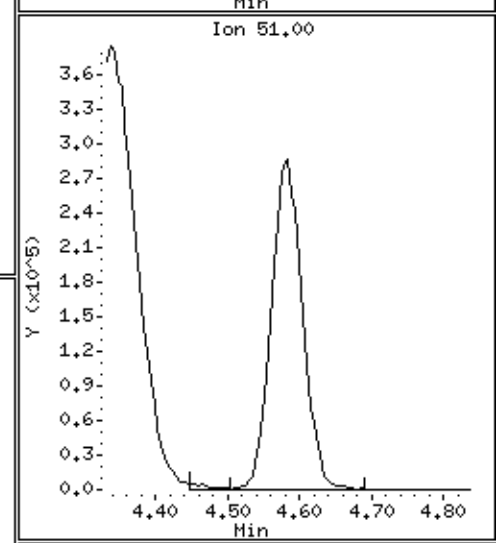
5 Enflurane

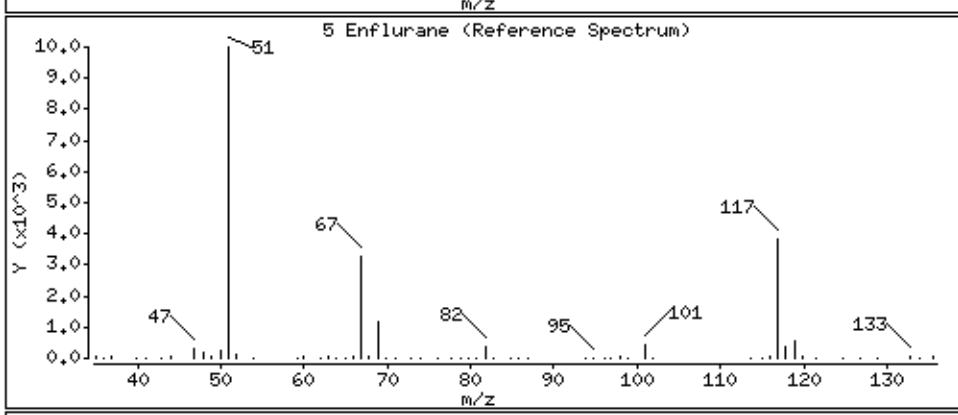
Concentration: 49.2 ug/L

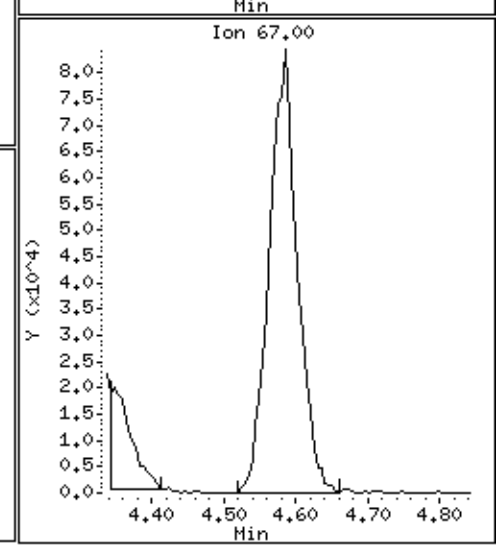


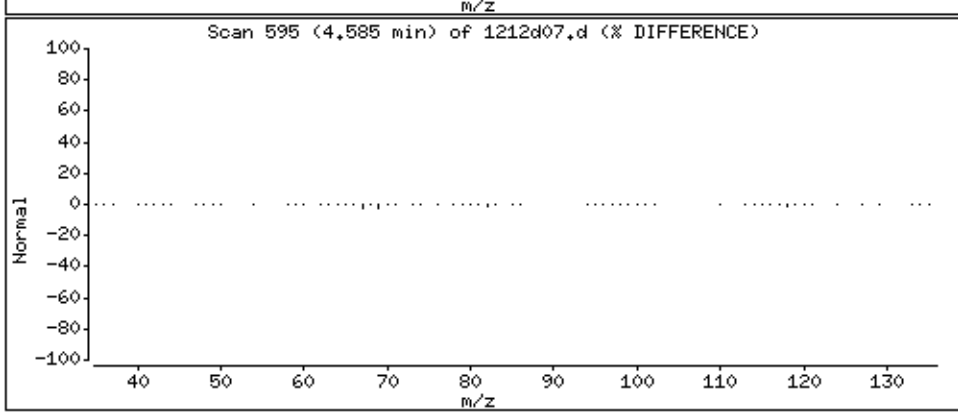












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

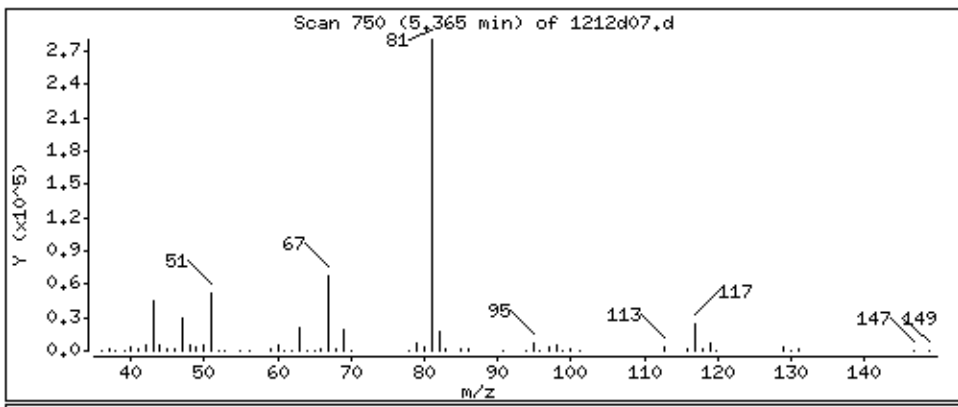
Operator: GEM

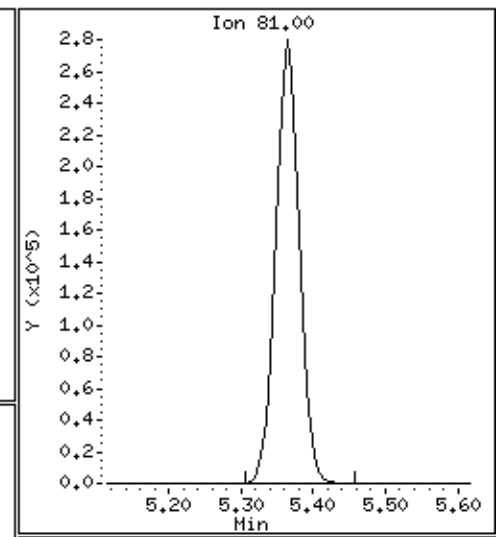
Column phase: DB-624

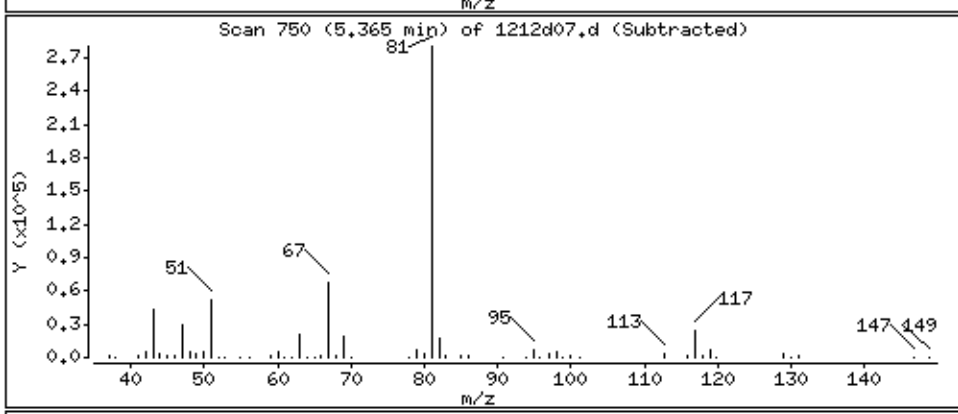
Column diameter: 0.18

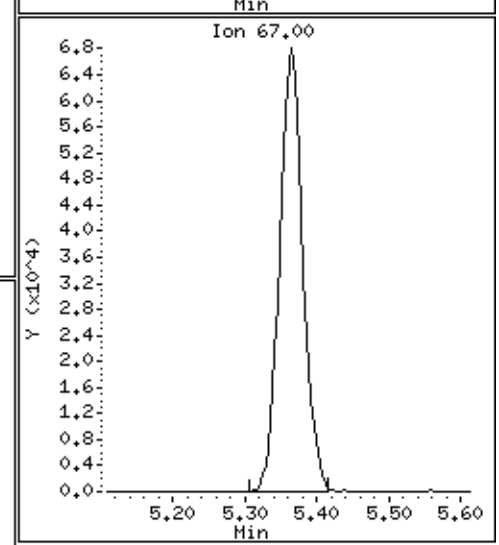
6 Halomar

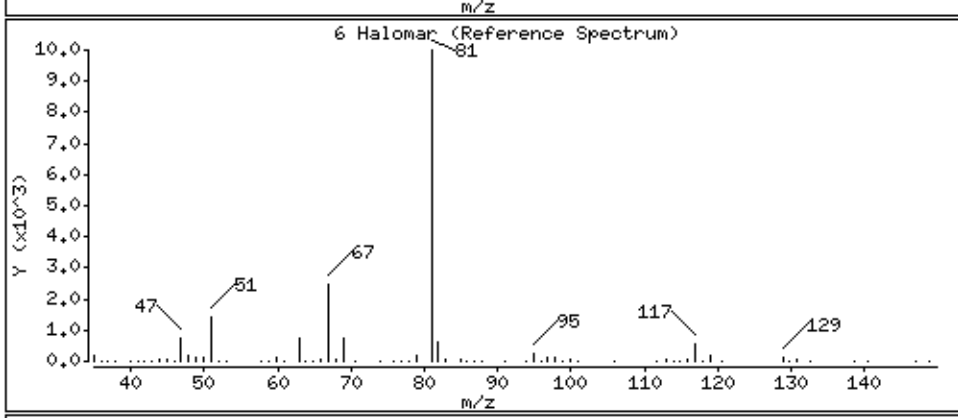
Concentration: 45.6 ug/L

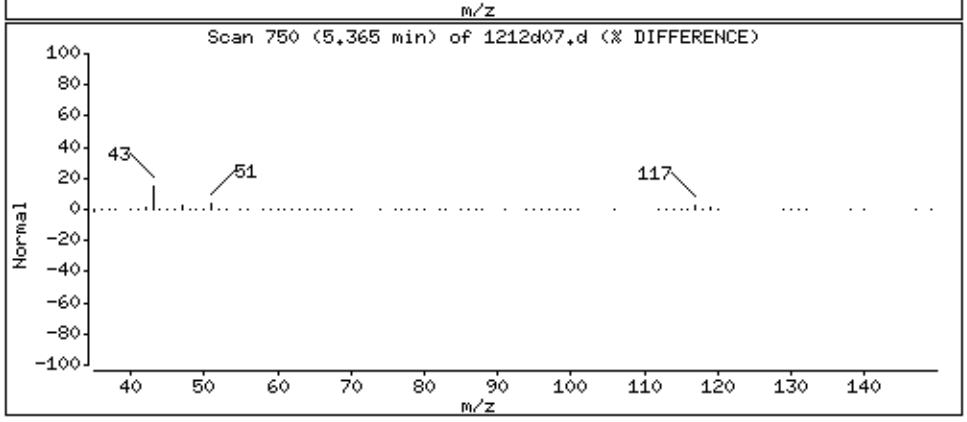












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

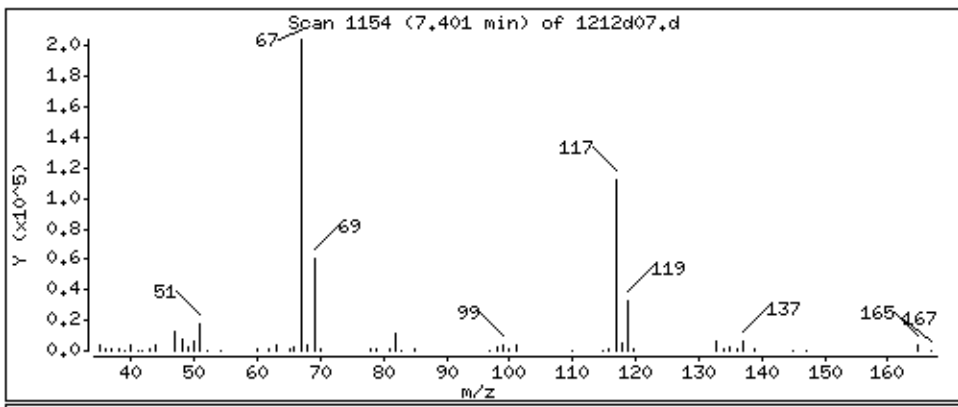
Operator: GEM

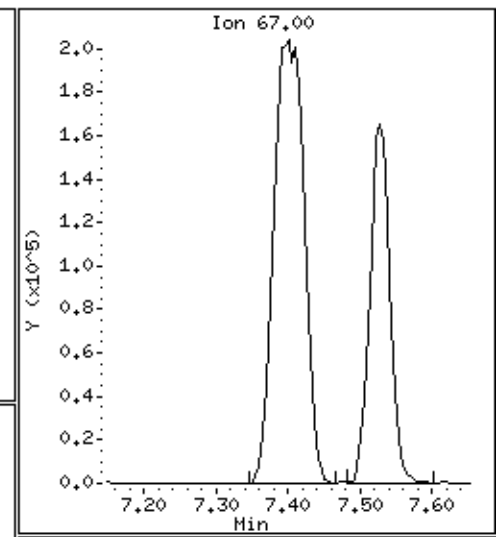
Column phase: DB-624

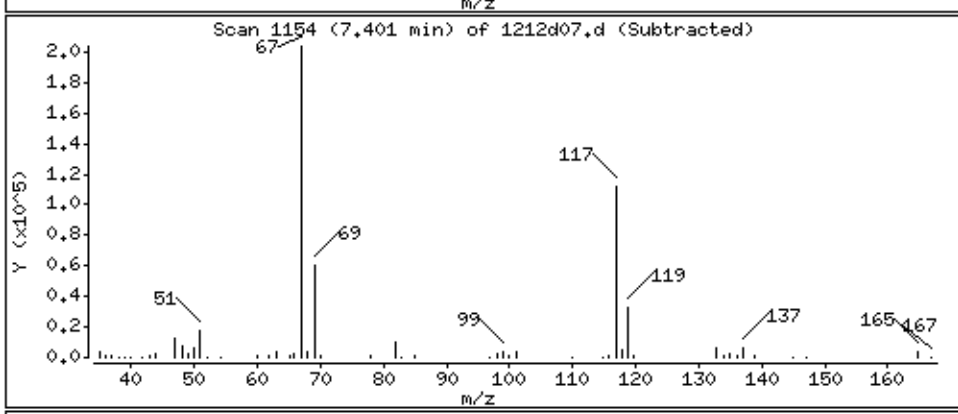
Column diameter: 0.18

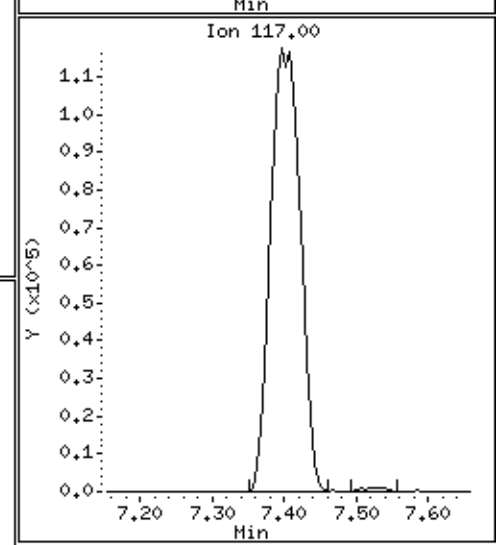
7 Haloether 421

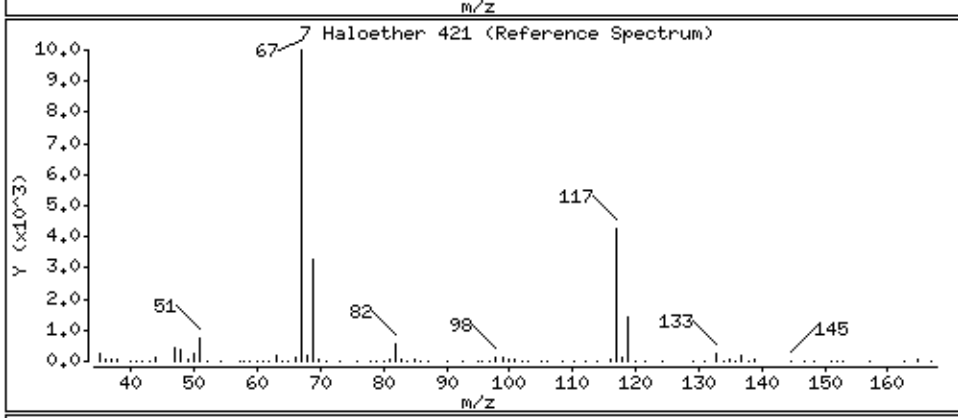
Concentration: 45.6 ug/L

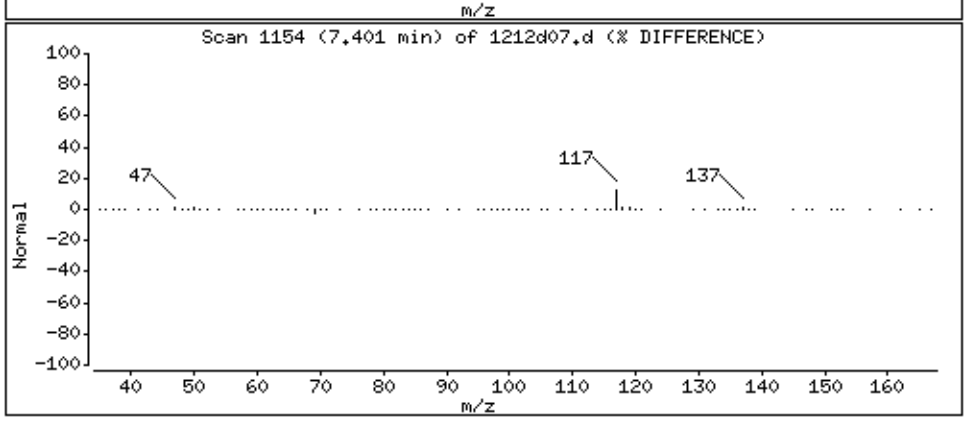












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

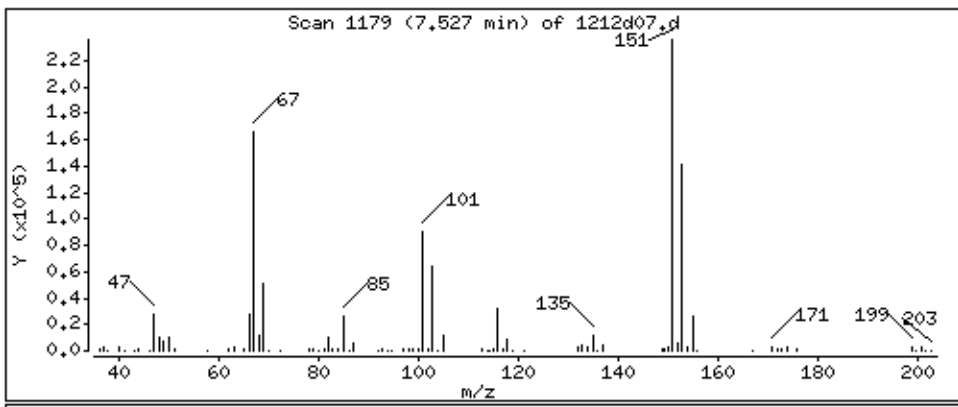
Operator: GEM

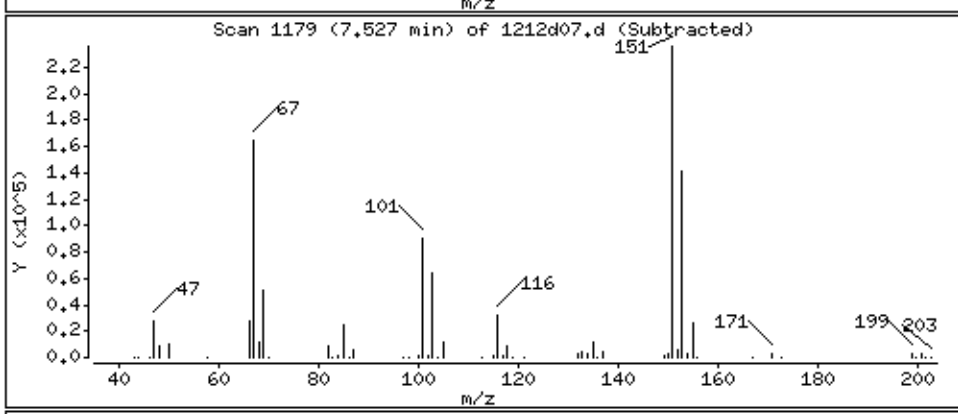
Column phase: DB-624

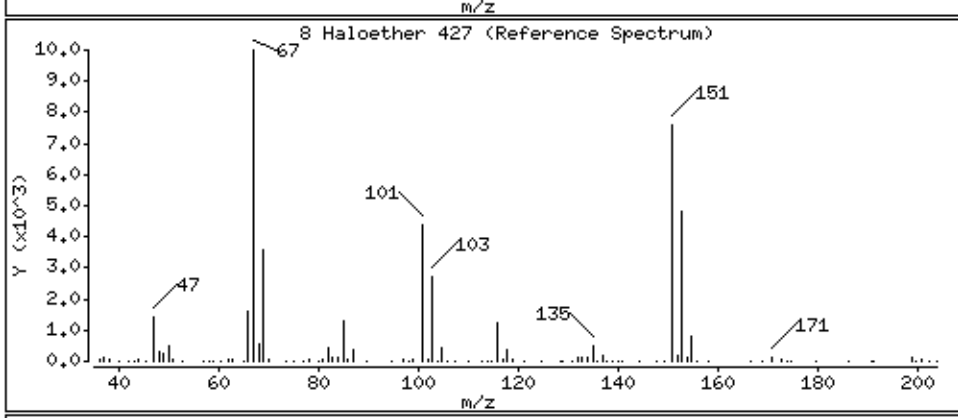
Column diameter: 0.18

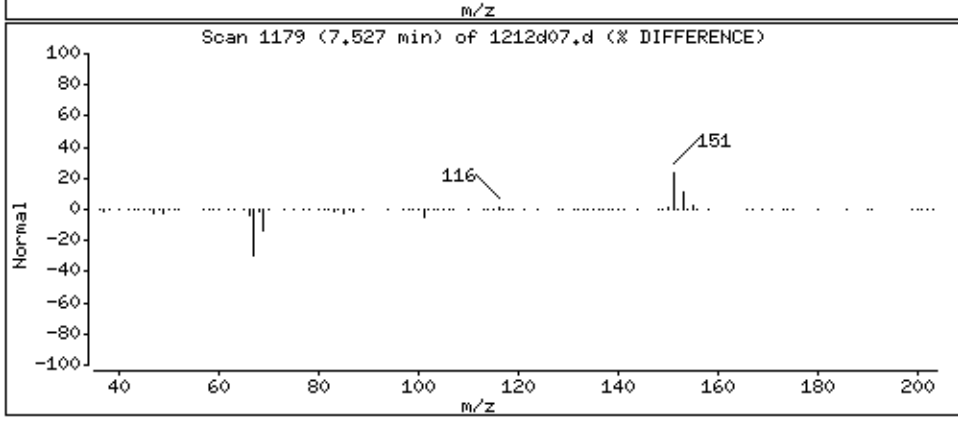
8 Haloether 427

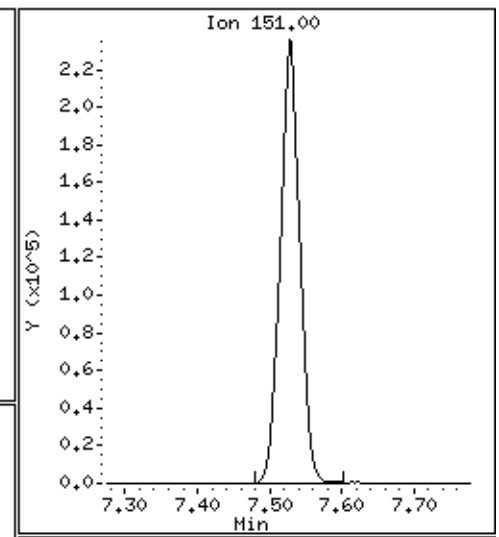
Concentration: 48.8 ug/L

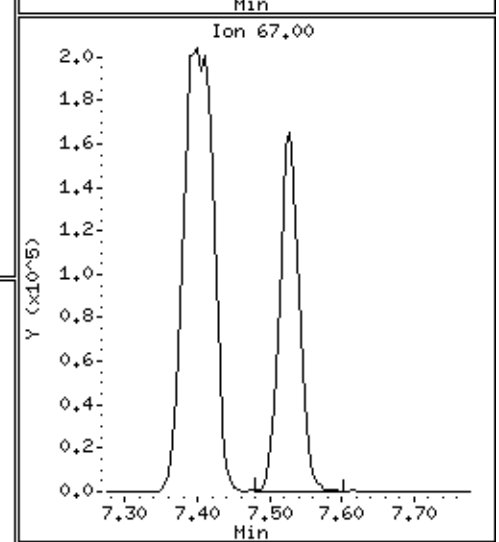


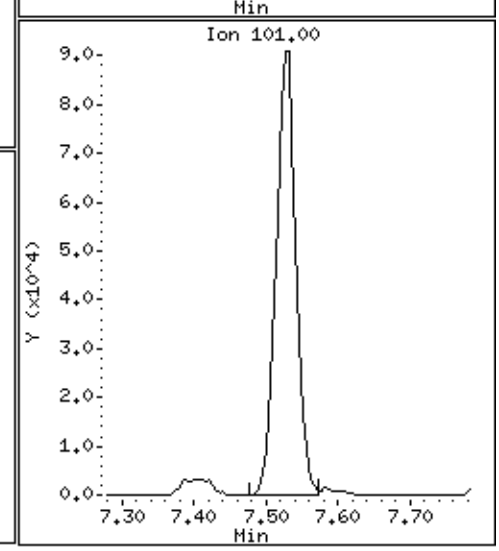












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

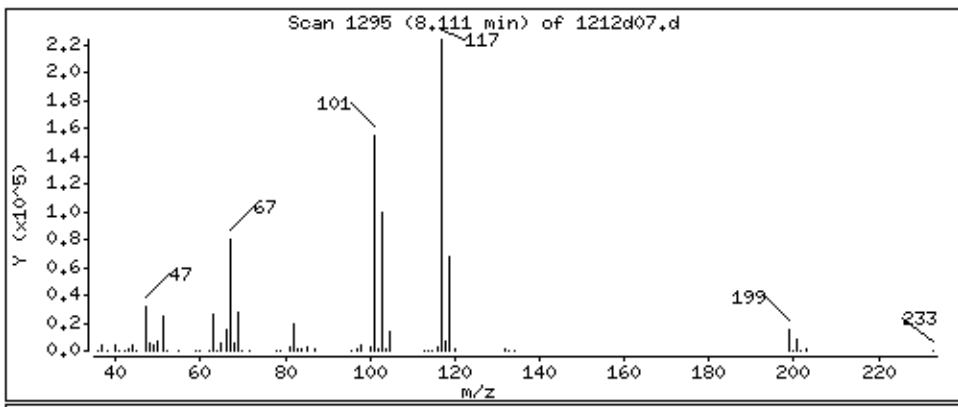
Operator: GEM

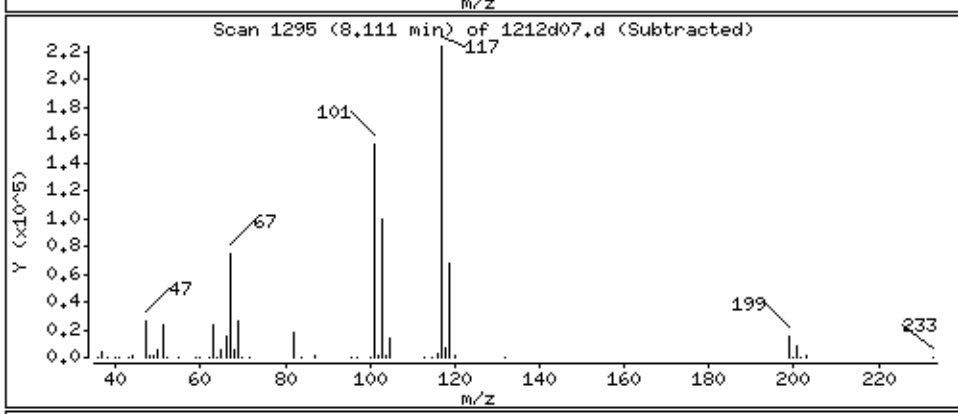
Column phase: DB-624

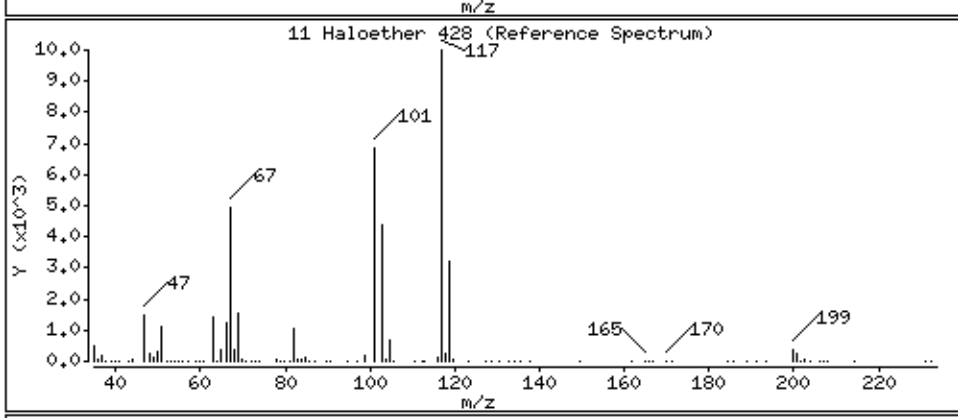
Column diameter: 0.18

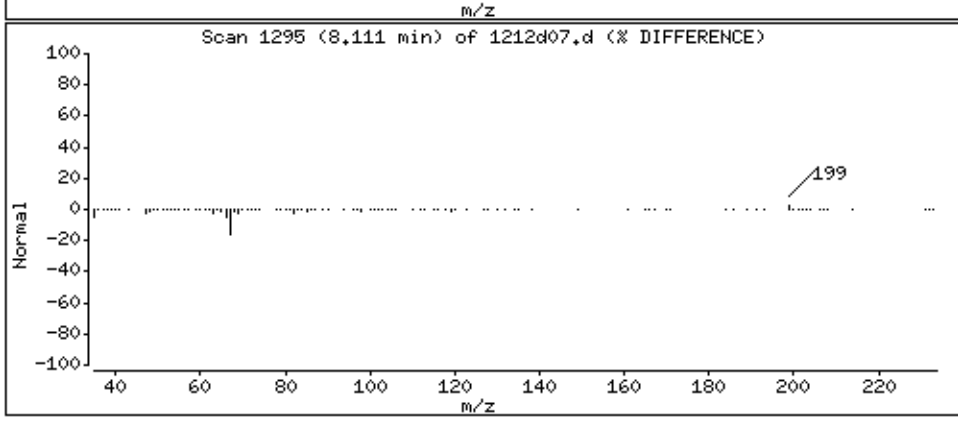
11 Haloether 428

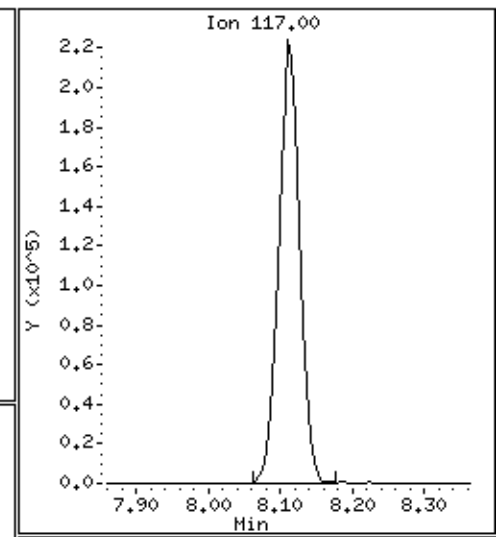
Concentration: 46.0 ug/L

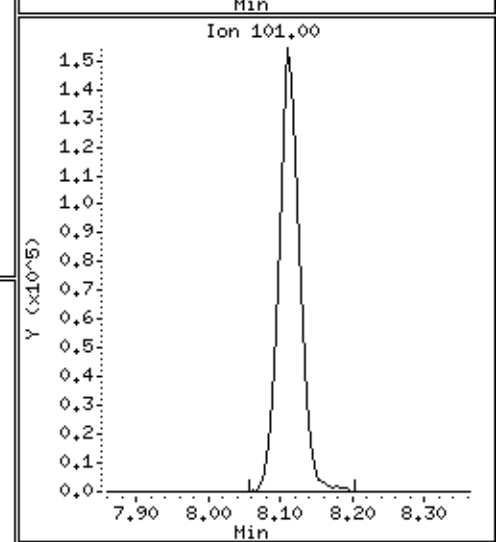


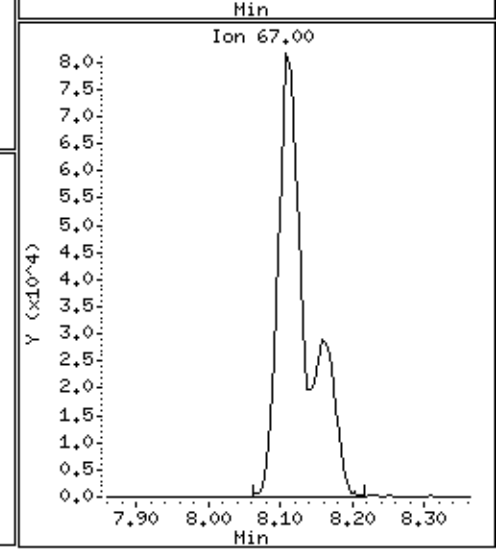












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

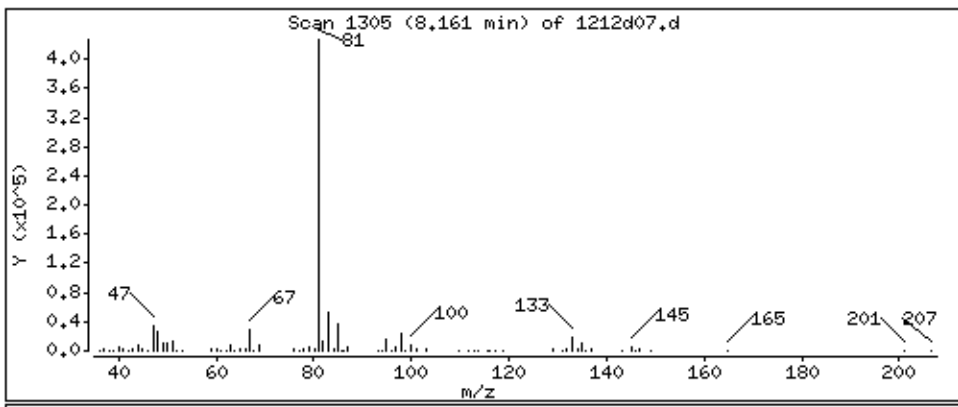
Operator: GEM

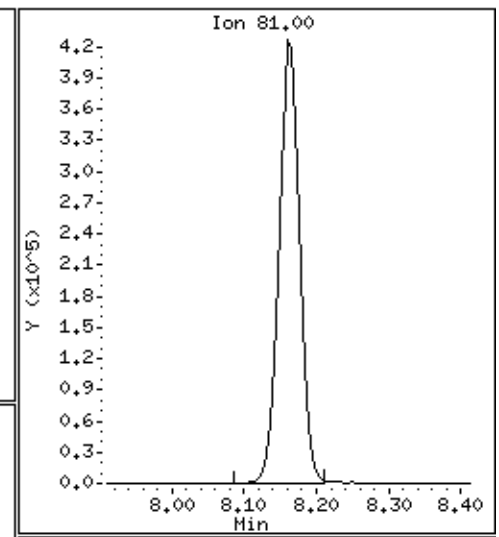
Column phase: DB-624

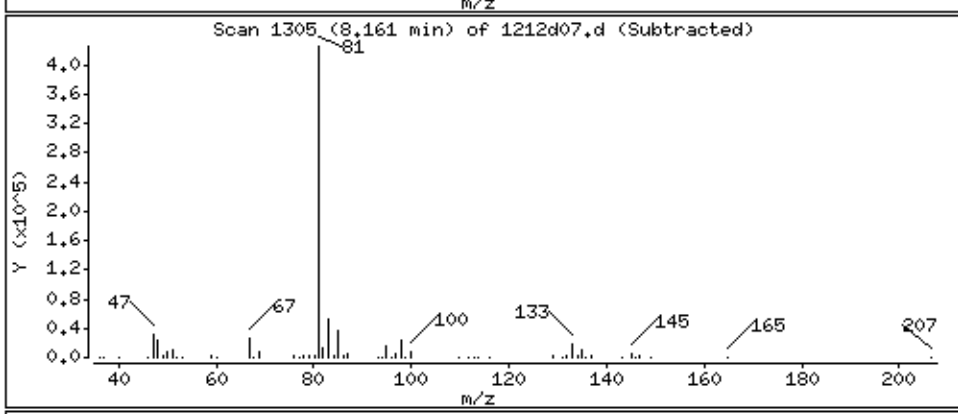
Column diameter: 0.18

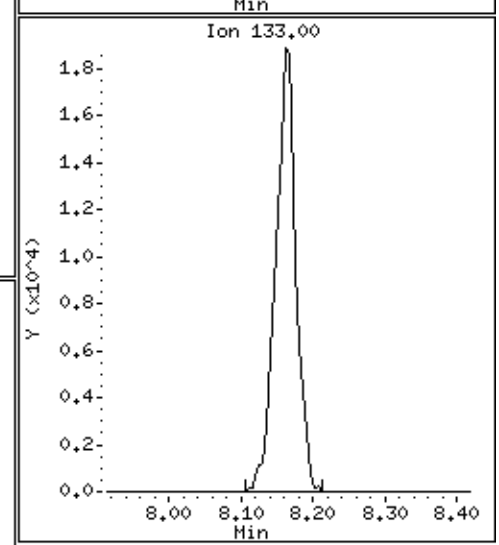
12 Methoxyflurane

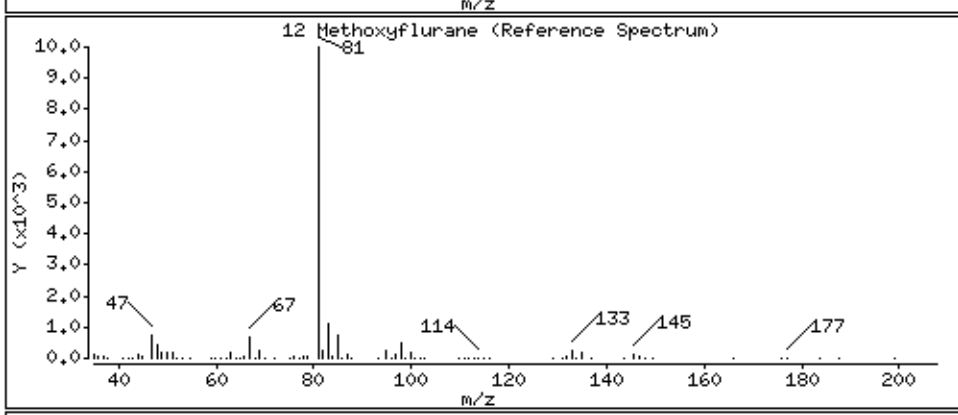
Concentration: 43.5 ug/L

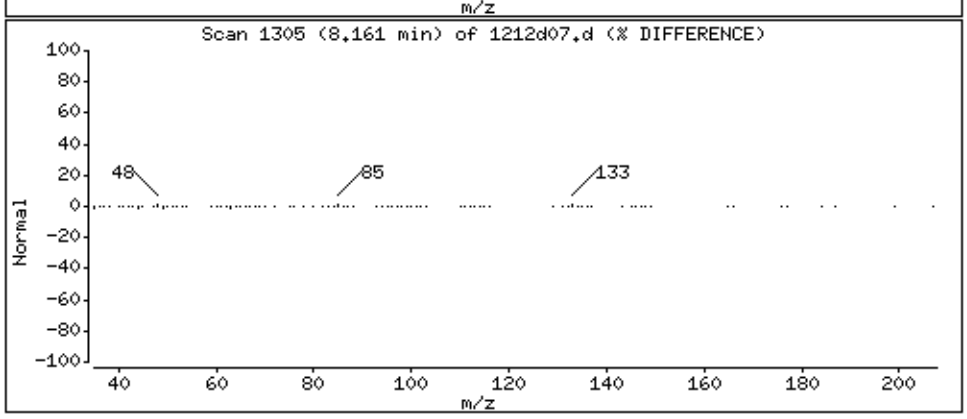












Data File: \\v20winTarget\chem\20msvd.i\121217ha.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

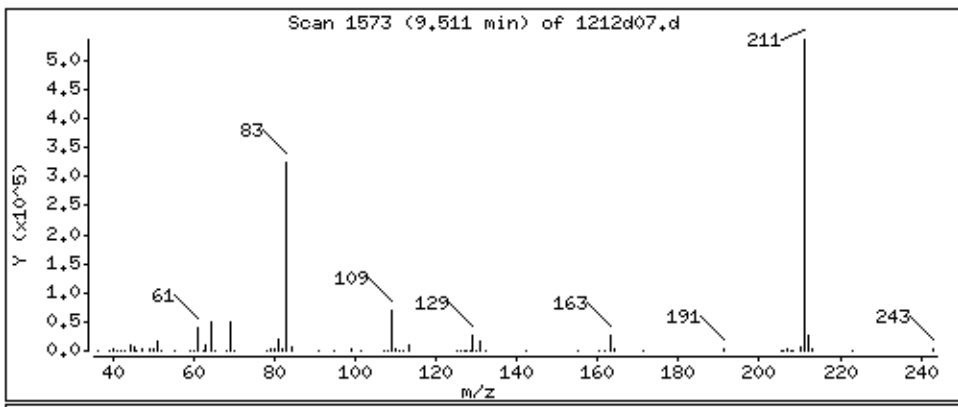
Operator: GEM

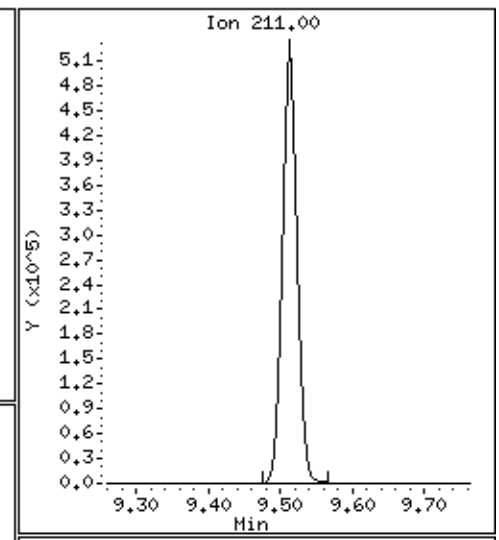
Column phase: DB-624

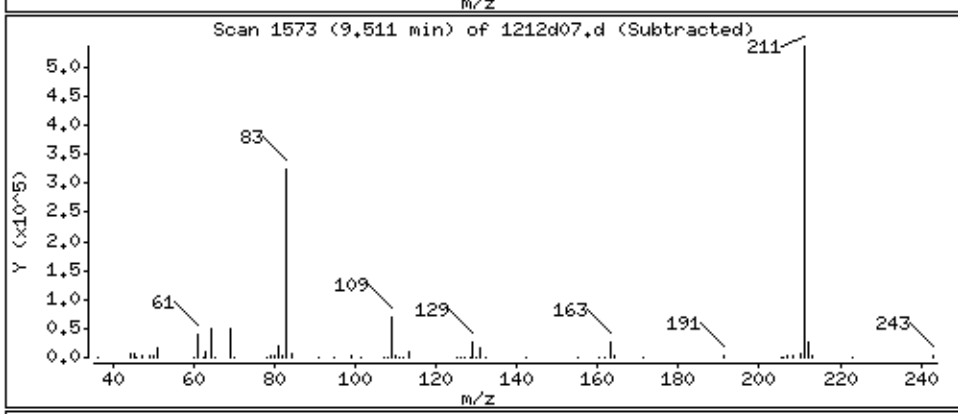
Column diameter: 0.18

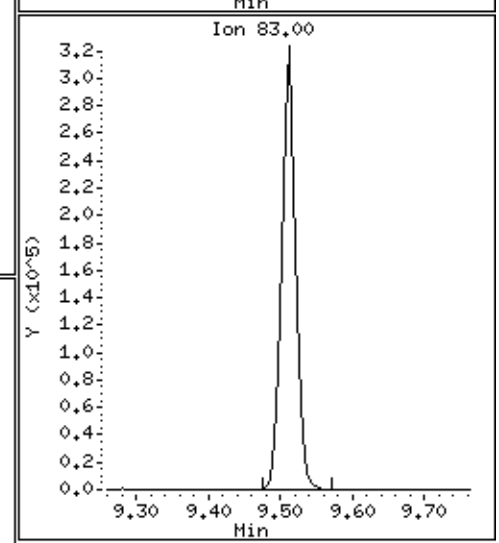
13 Haloether 528

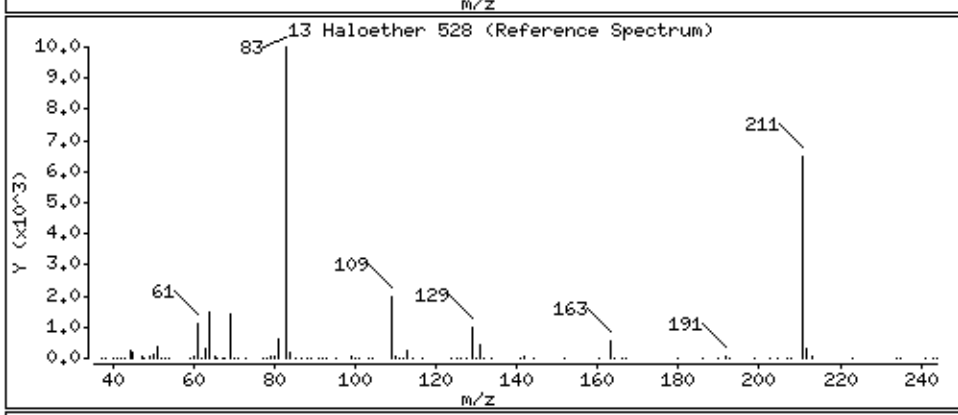
Concentration: 46.6 ug/L

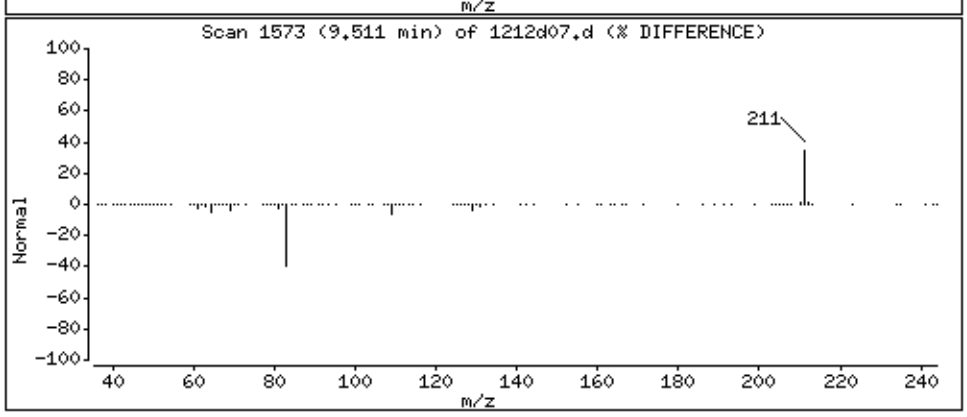






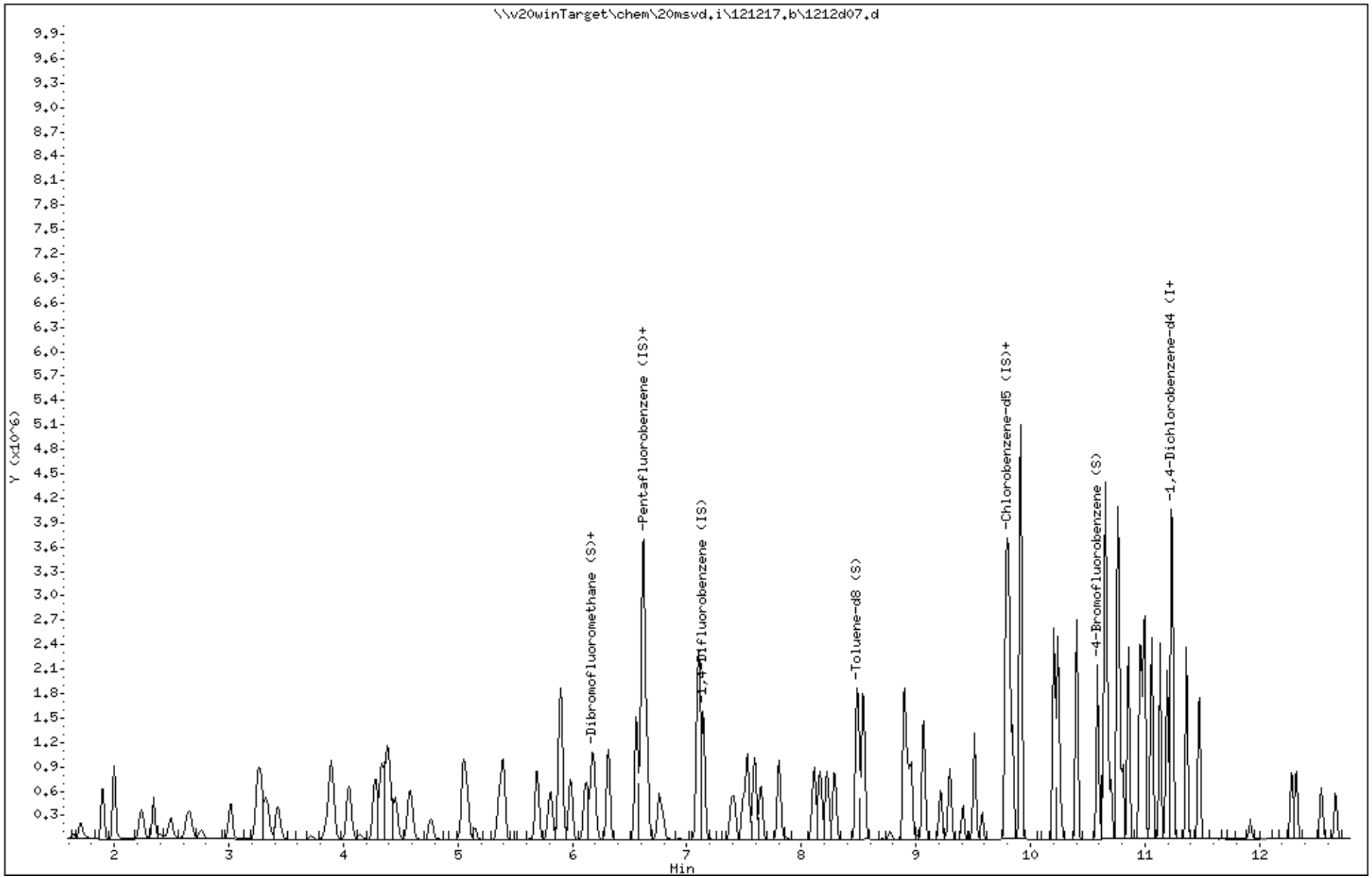






Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217ha.b/1212d07.d
Injection Date: 12-DEC-2017 10:33
Instrument: 20msvd.i
Lab Sample ID: 415095
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d
Date : 12-DEC-2017 10:33
Client ID: MBLCS
Instrument: 20msvd.i
Sample Info: 415095,SPK
Purge Volume: 5.0
Operator: GEM
Column phase: RTX VMS 30m
Column diameter: 0.25



Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

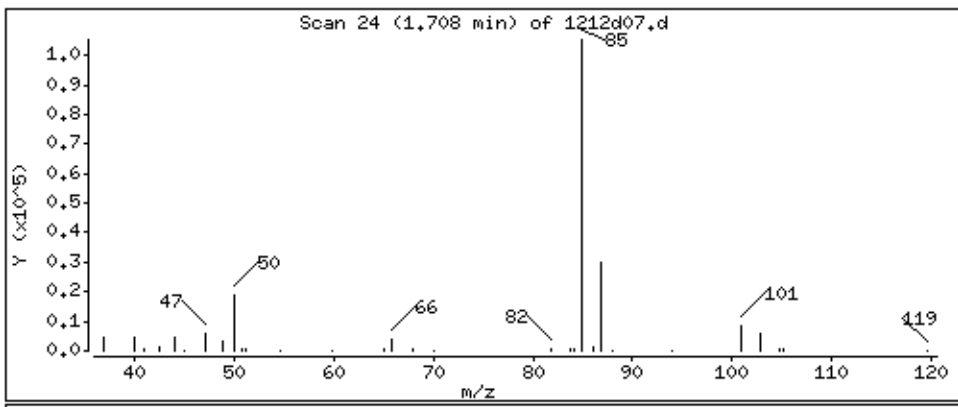
Operator: GEM

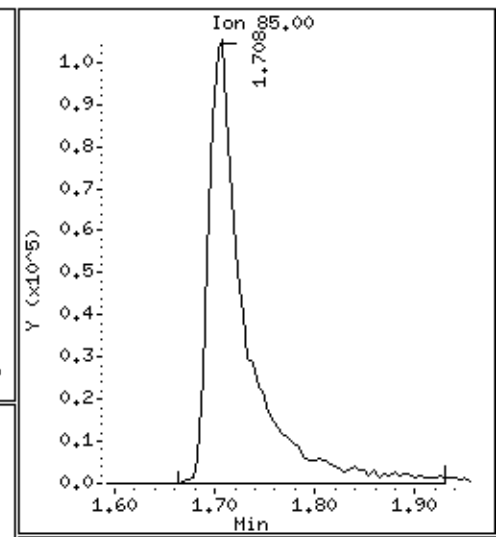
Column phase: RTX VMS 30m

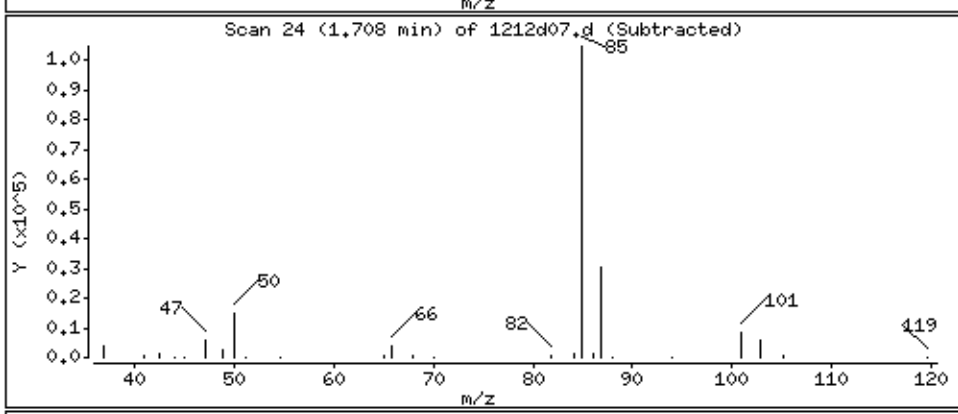
Column diameter: 0.25

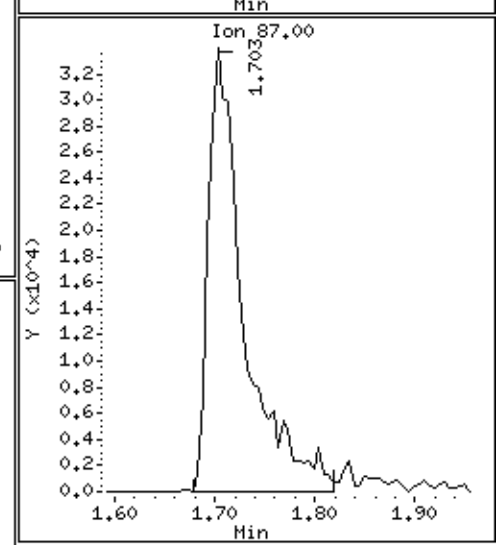
1 Dichlorodifluoromethane

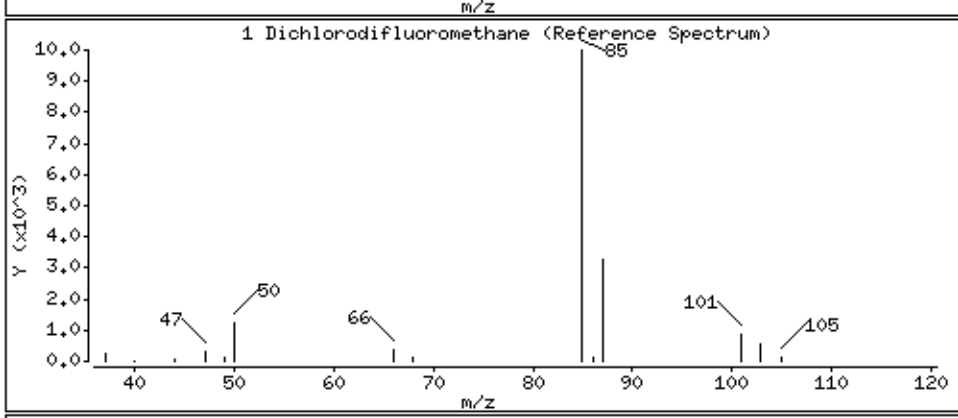
Concentration: 32.9 ug/L

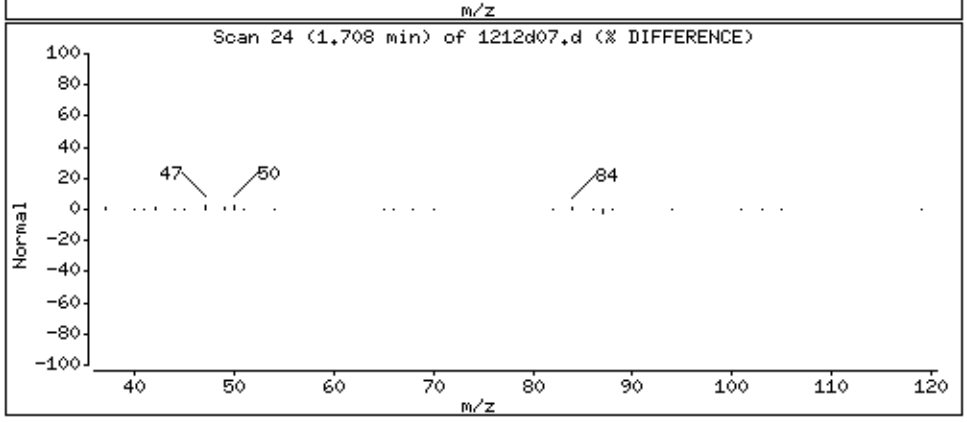












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

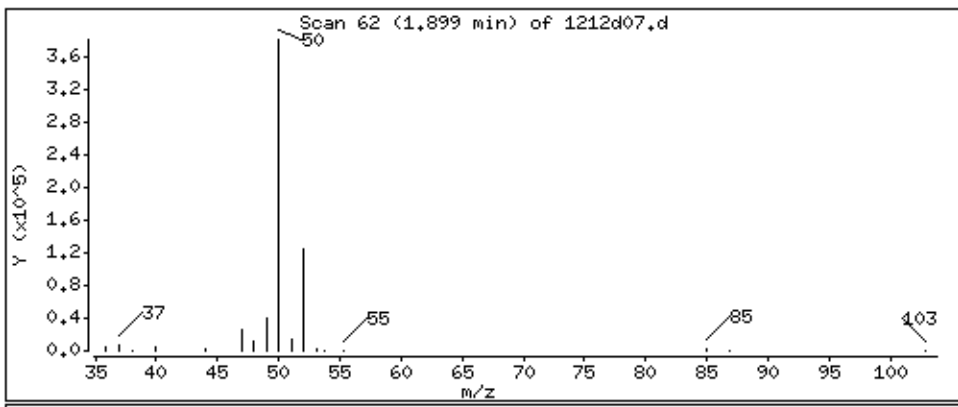
Operator: GEM

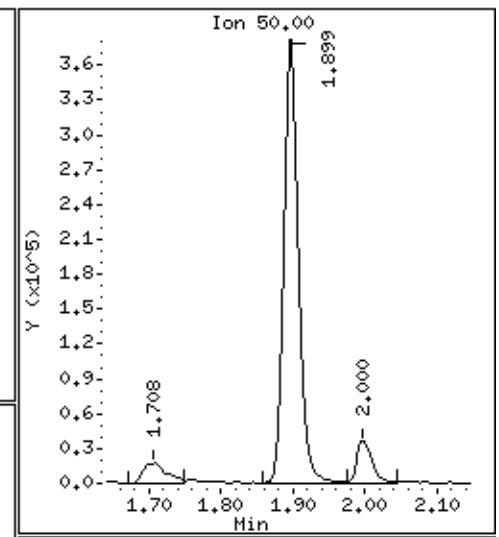
Column phase: RTX VMS 30m

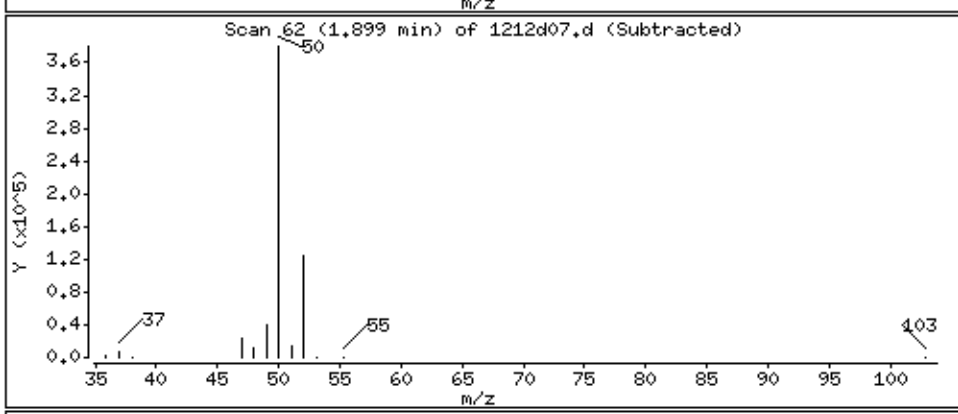
Column diameter: 0.25

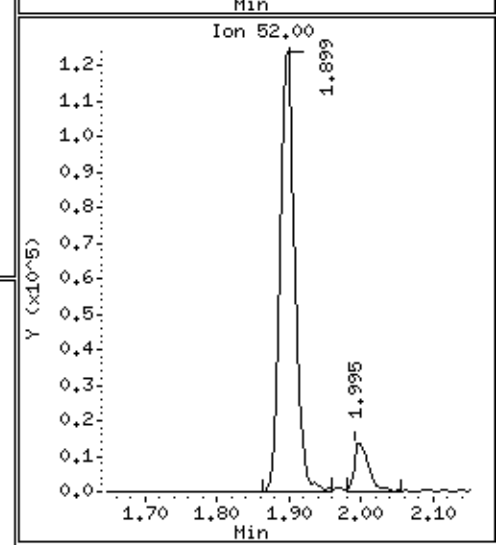
2 Chloromethane

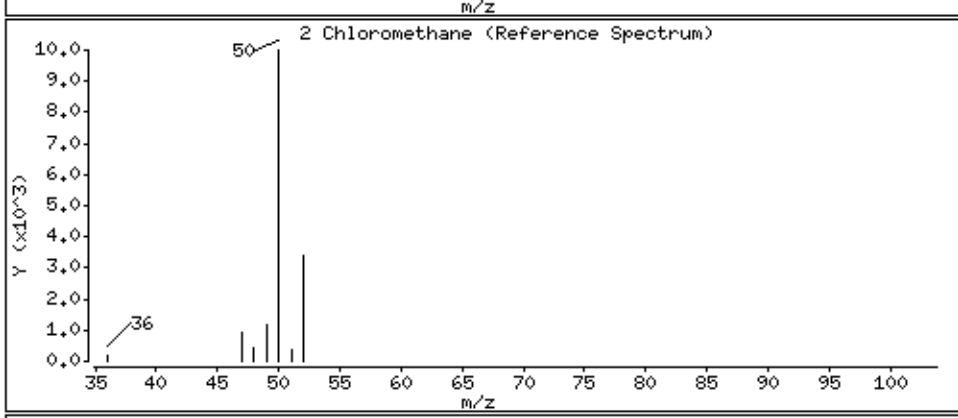
Concentration: 41.0 ug/L

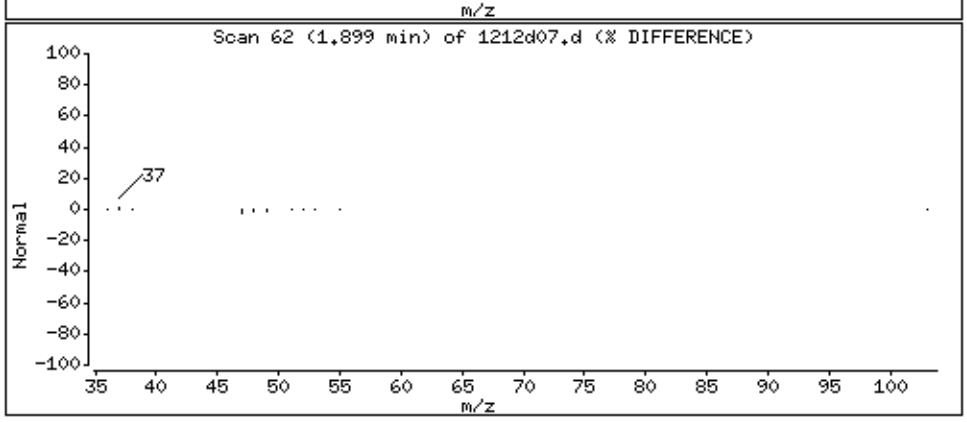












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

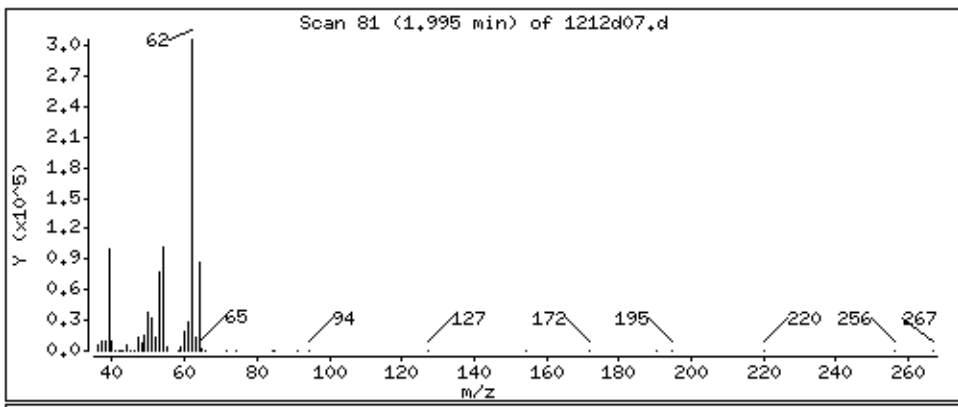
Operator: GEM

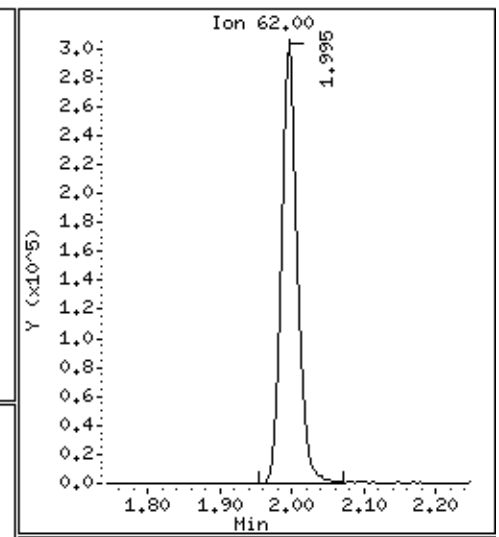
Column phase: RTX VMS 30m

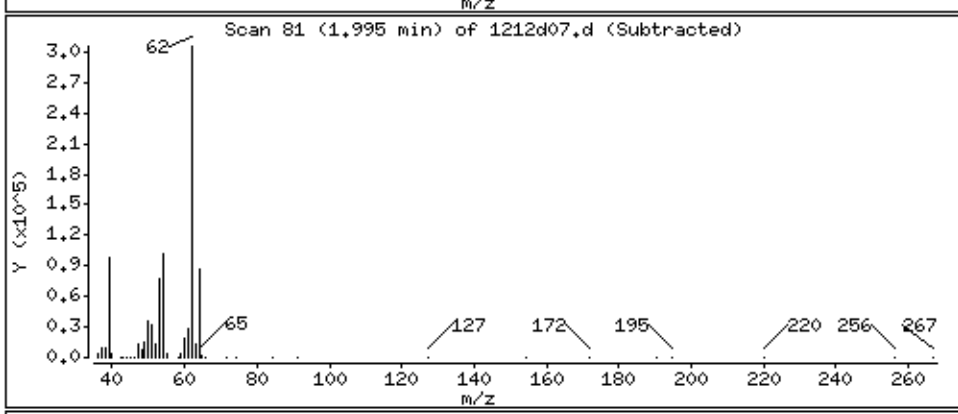
Column diameter: 0.25

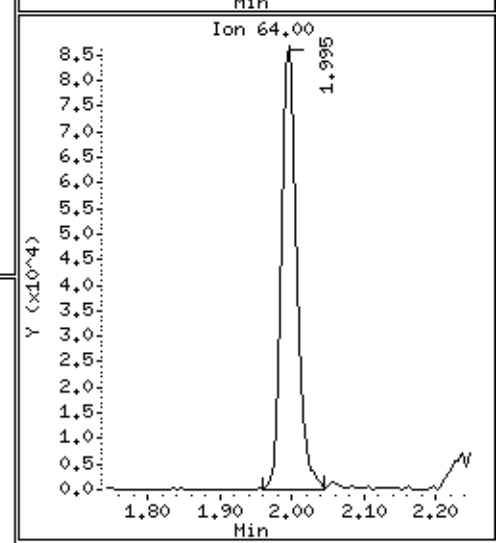
3 Vinyl chloride

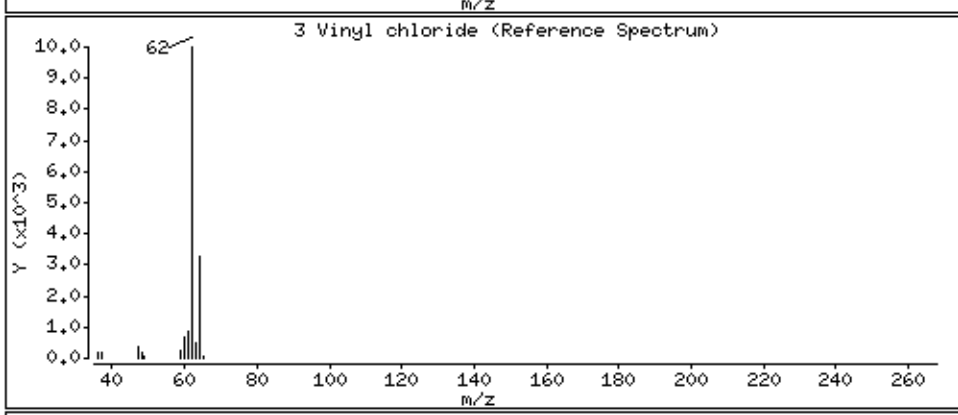
Concentration: 37.3 ug/L

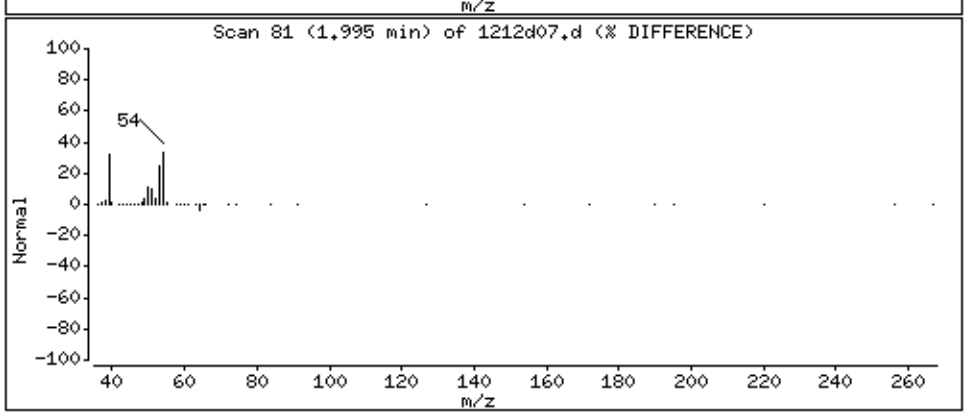












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

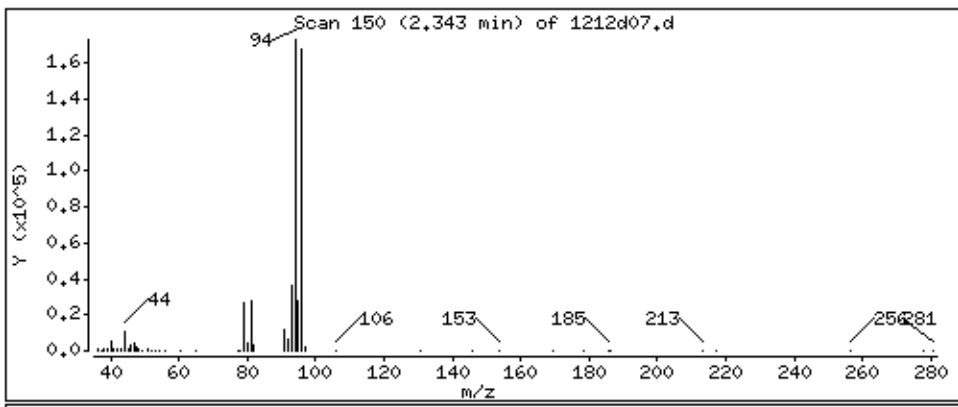
Operator: GEM

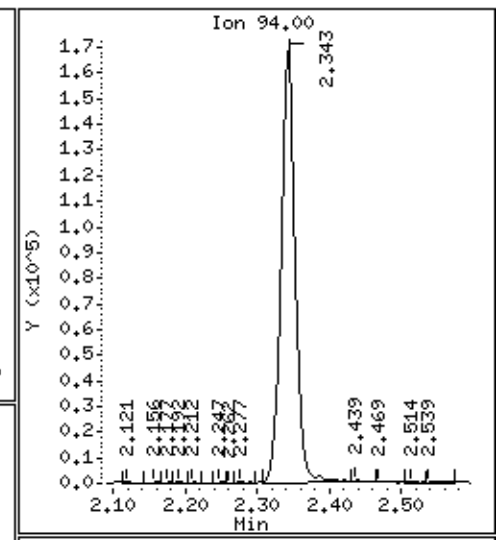
Column phase: RTX VMS 30m

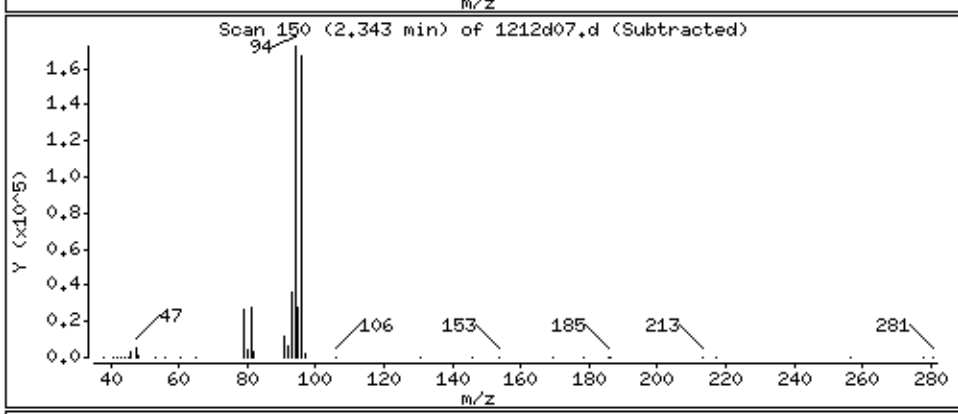
Column diameter: 0.25

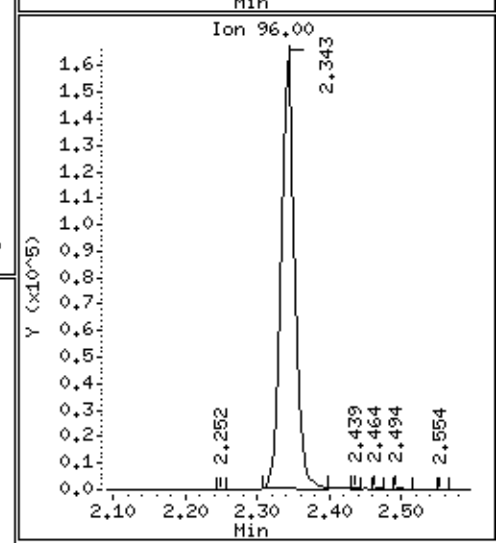
4 Bromomethane

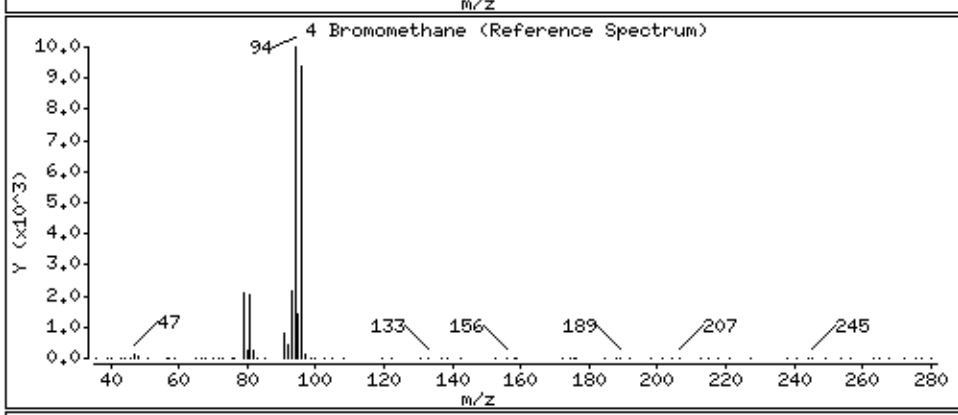
Concentration: 45.6 ug/L

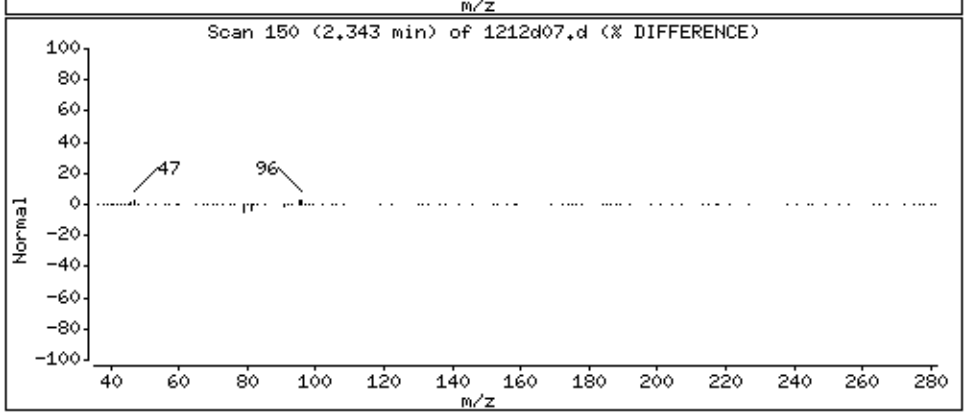












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

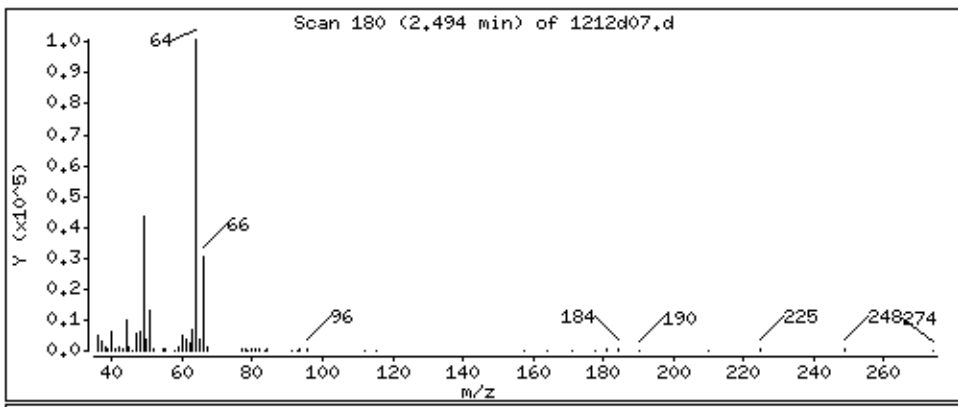
Operator: GEM

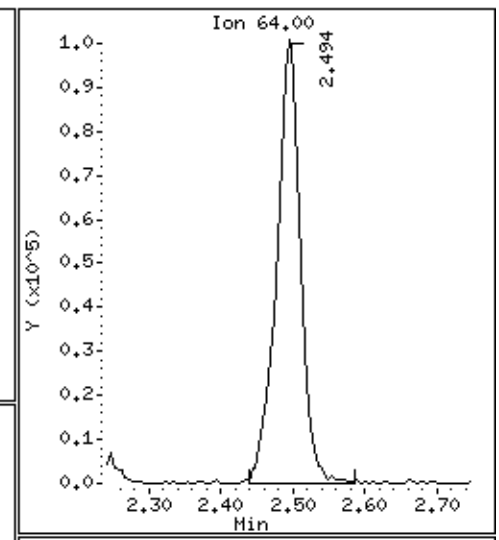
Column phase: RTX VMS 30m

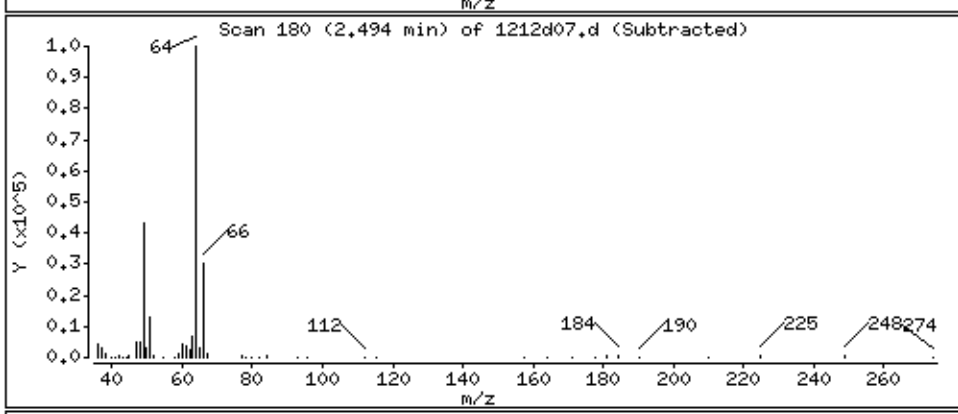
Column diameter: 0.25

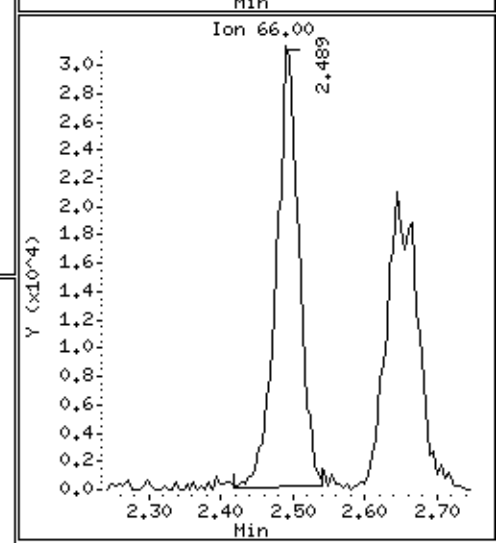
5 Chloroethane

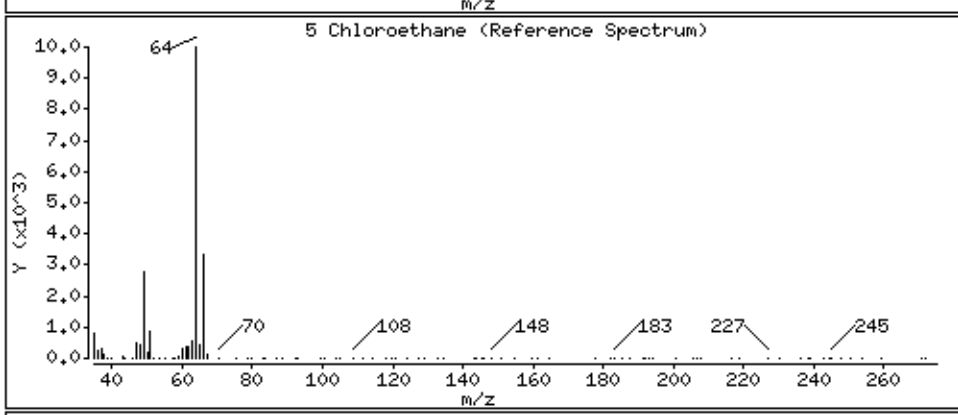
Concentration: 41.1 ug/L

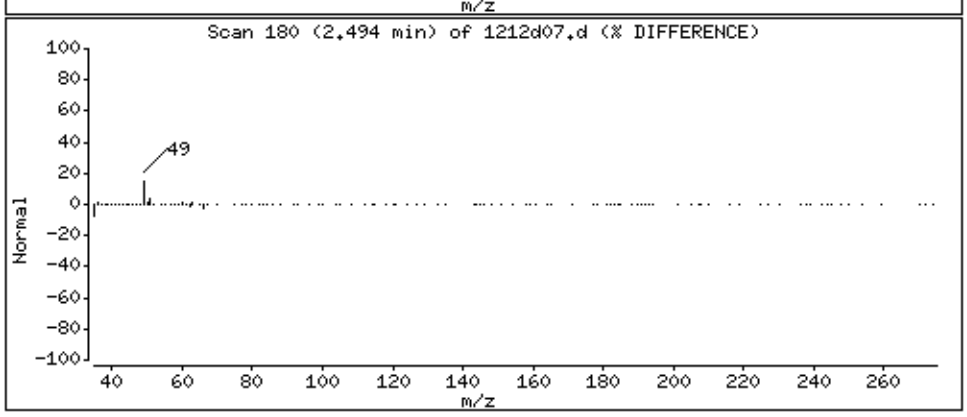












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

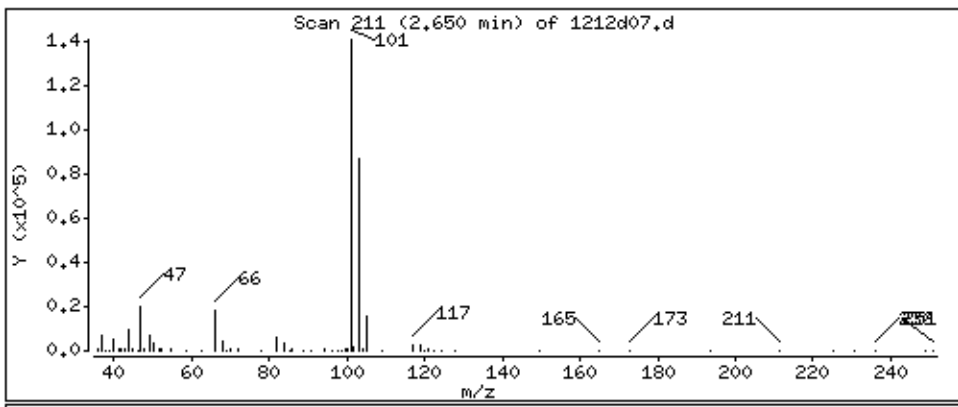
Operator: GEM

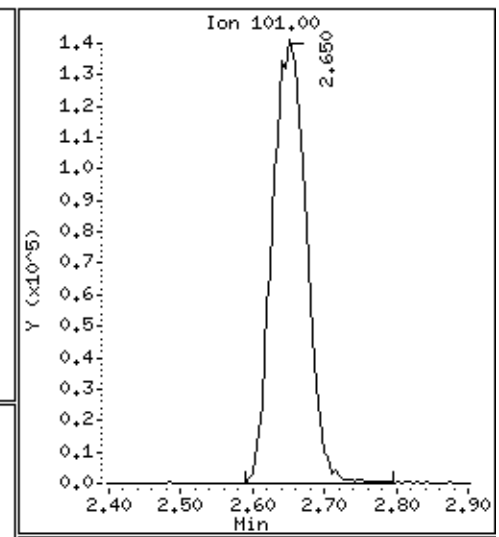
Column phase: RTX VMS 30m

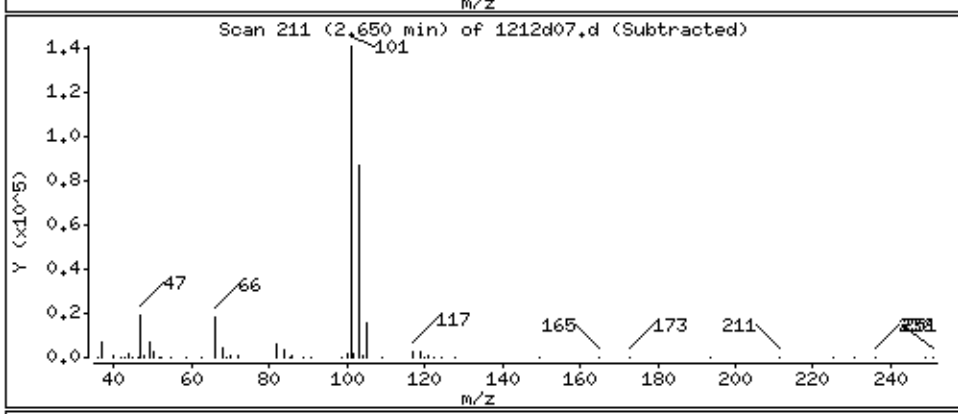
Column diameter: 0.25

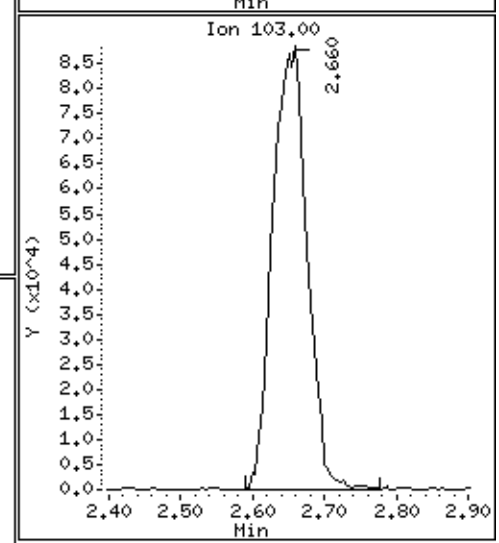
6 Trichlorofluoromethane

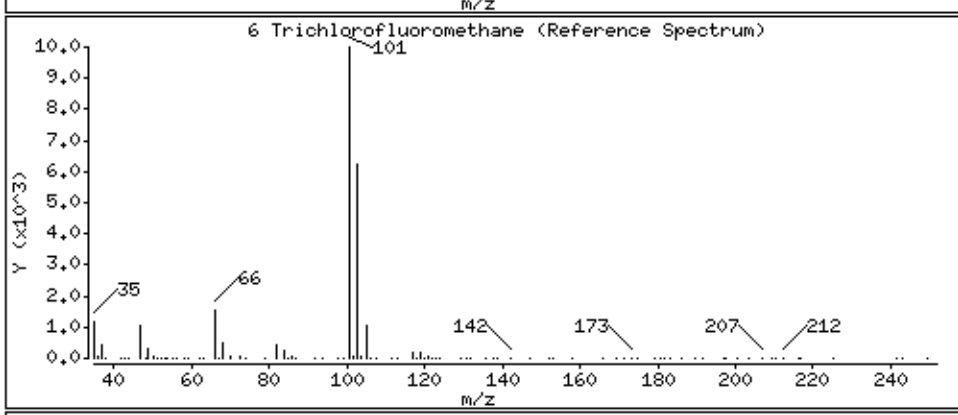
Concentration: 44.6 ug/L

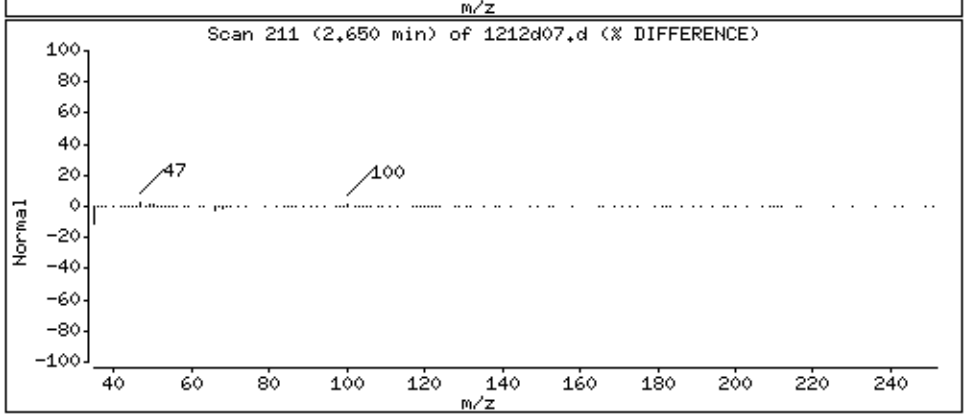












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

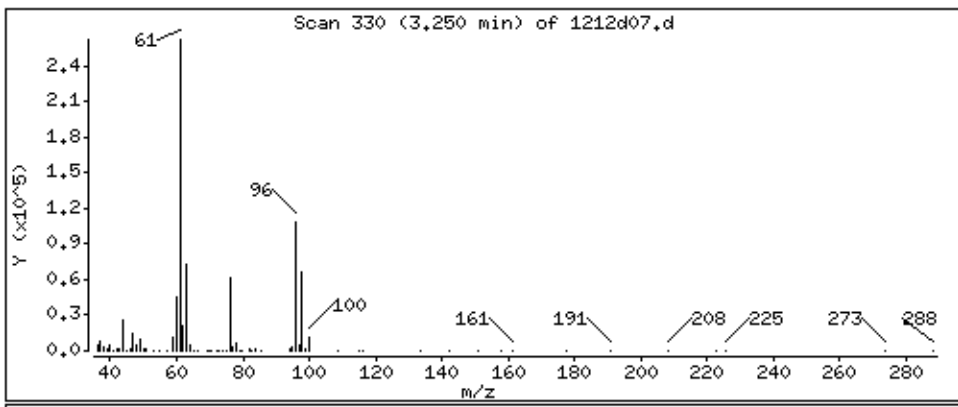
Operator: GEM

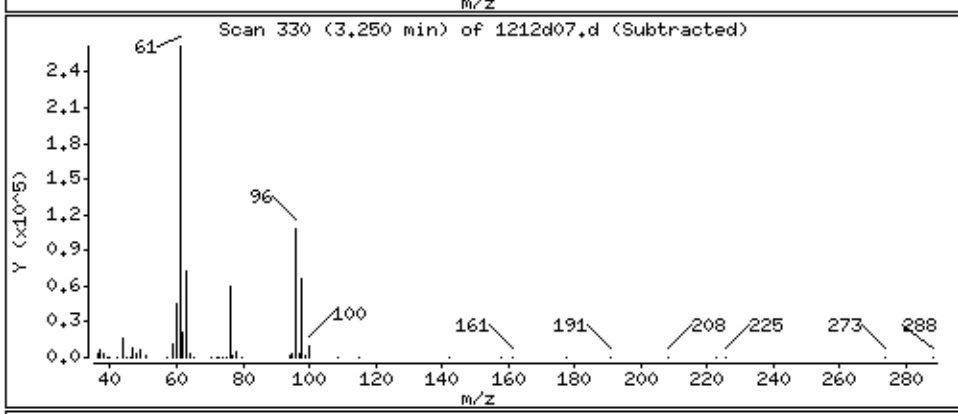
Column phase: RTX VMS 30m

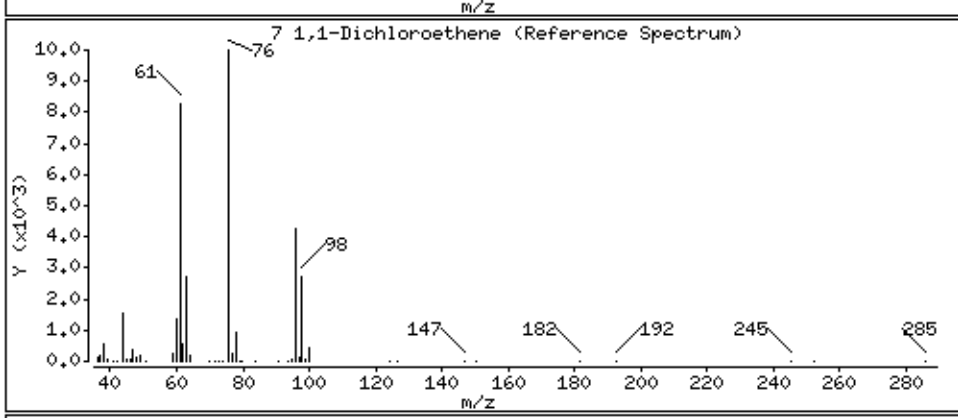
Column diameter: 0.25

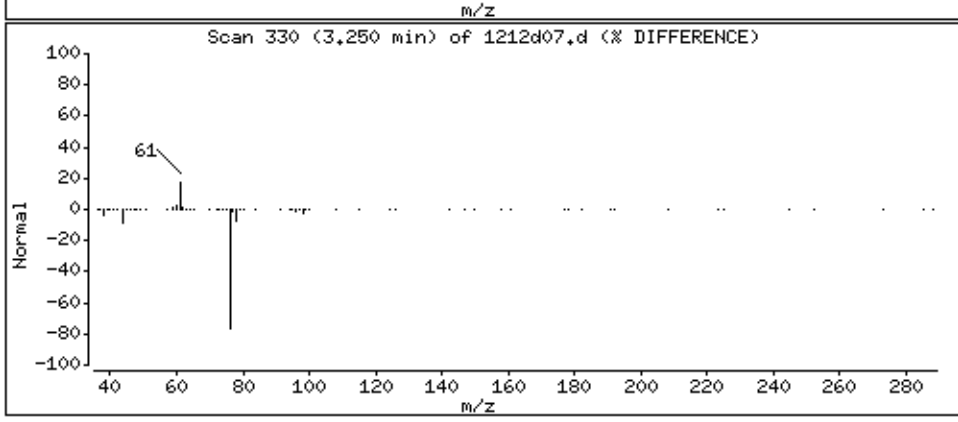
7 1,1-Dichloroethene

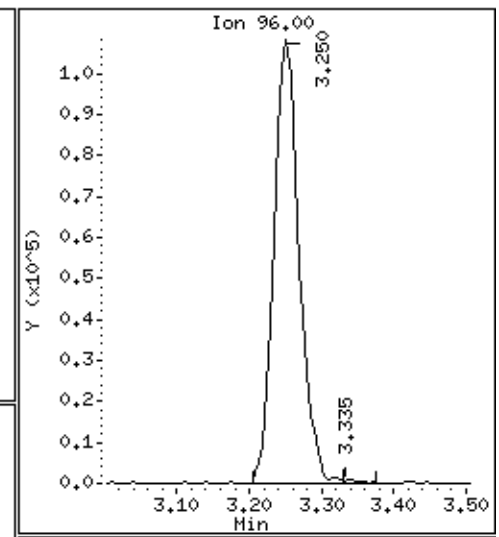
Concentration: 43.9 ug/L

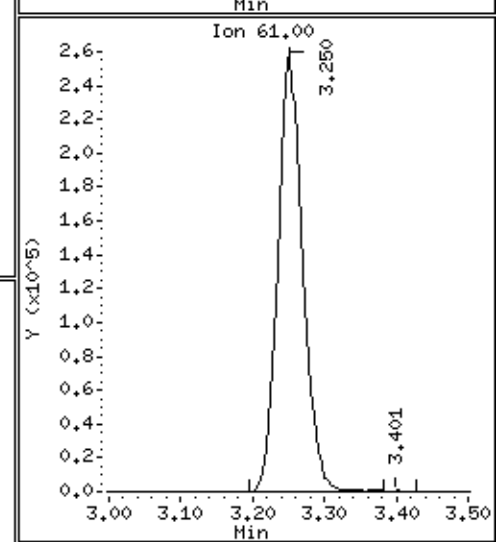


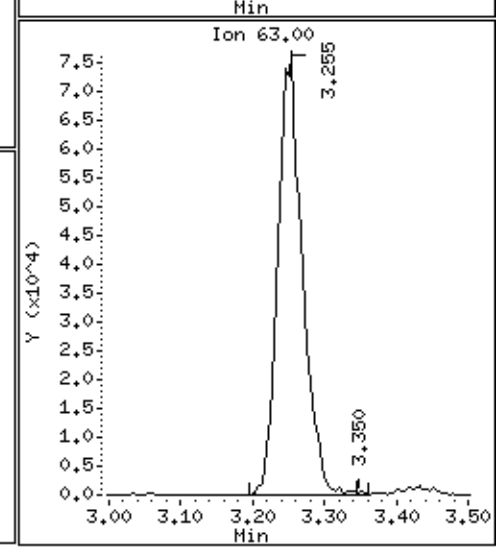












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

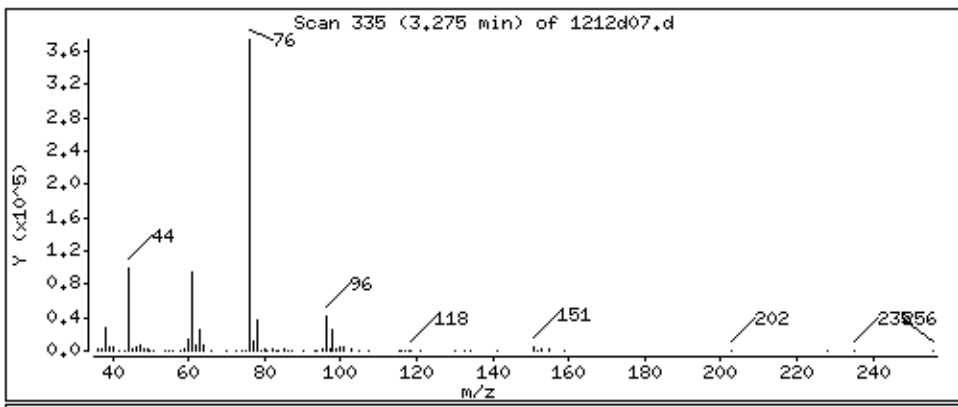
Operator: GEM

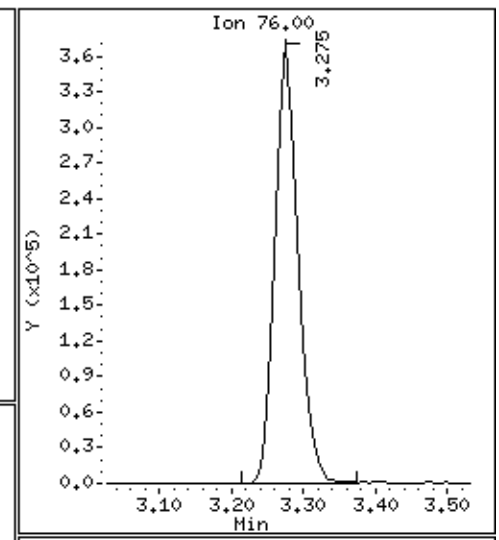
Column phase: RTX VMS 30m

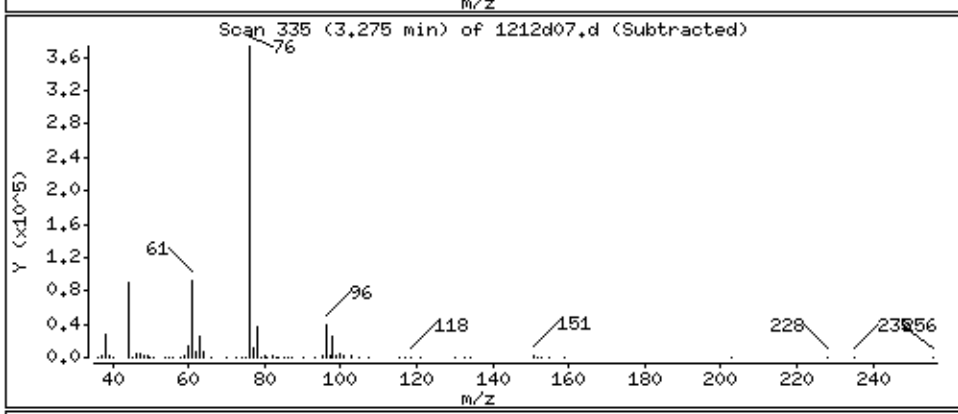
Column diameter: 0.25

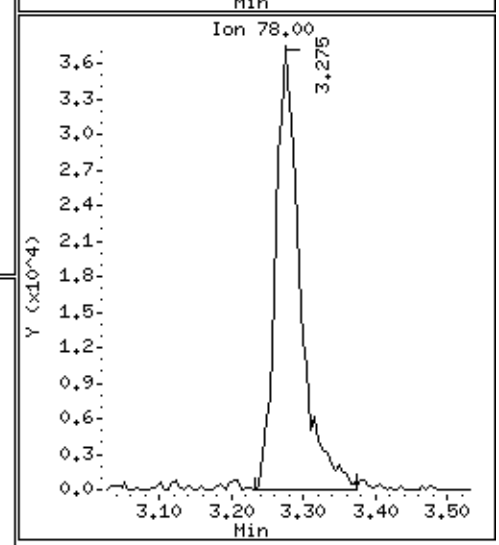
8 Carbon disulfide

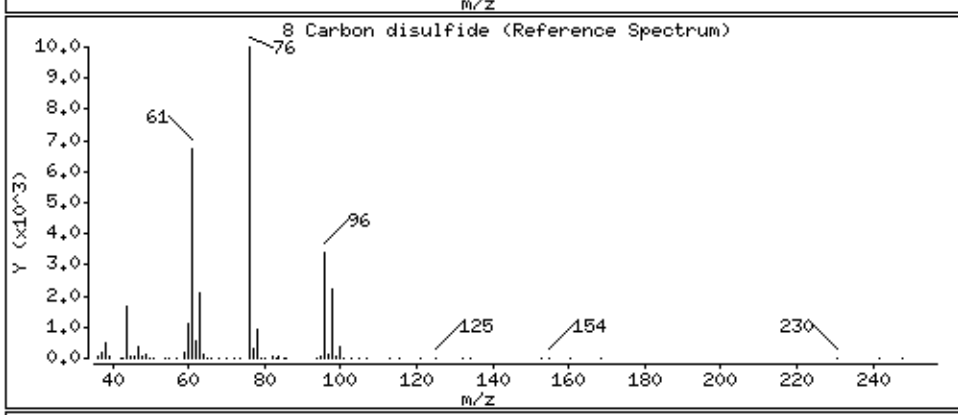
Concentration: 42.1 ug/L

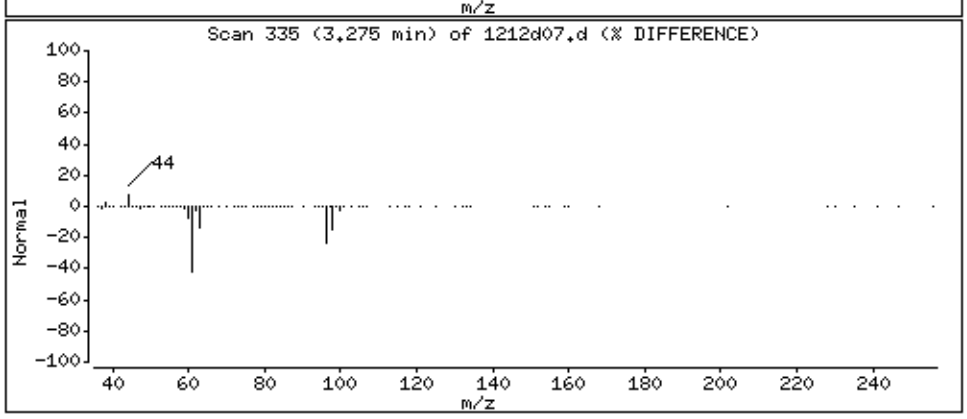












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

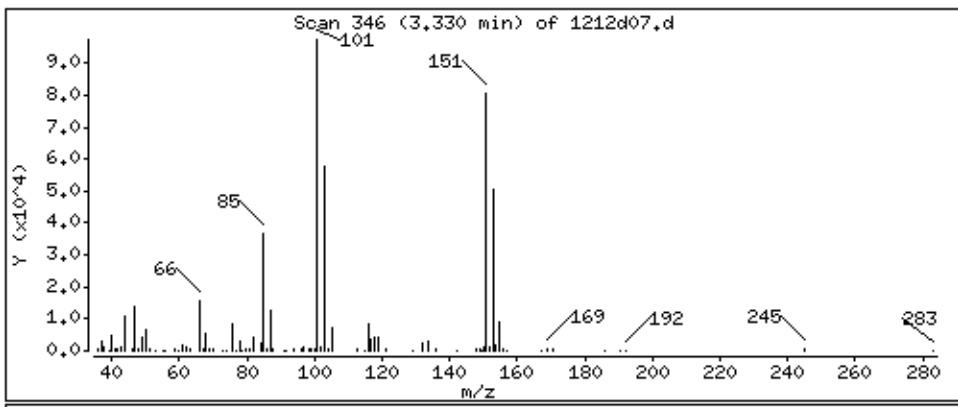
Operator: GEM

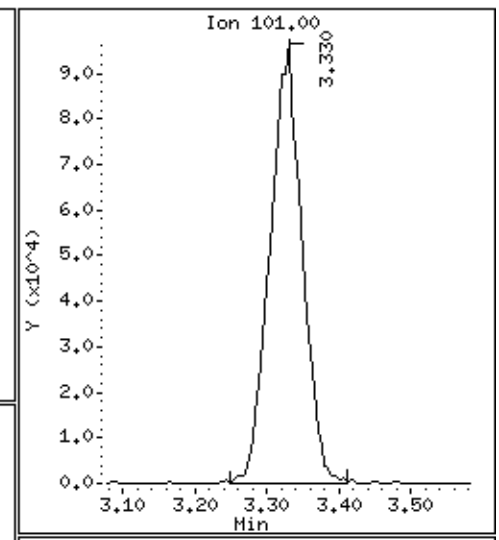
Column phase: RTX VMS 30m

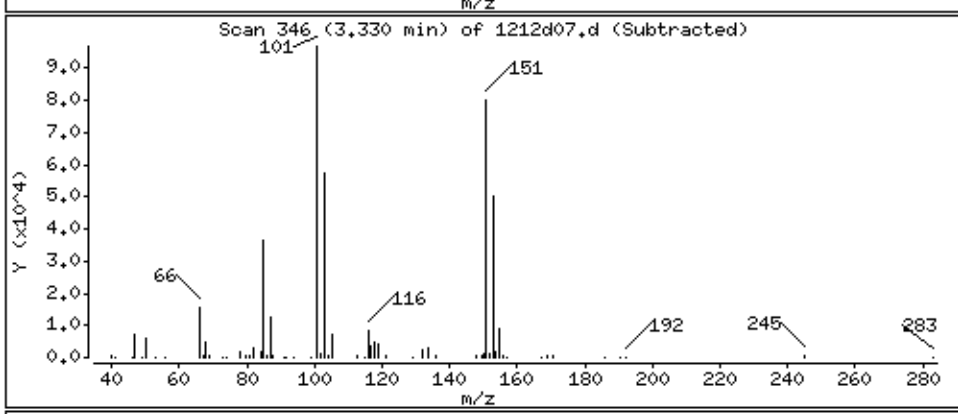
Column diameter: 0.25

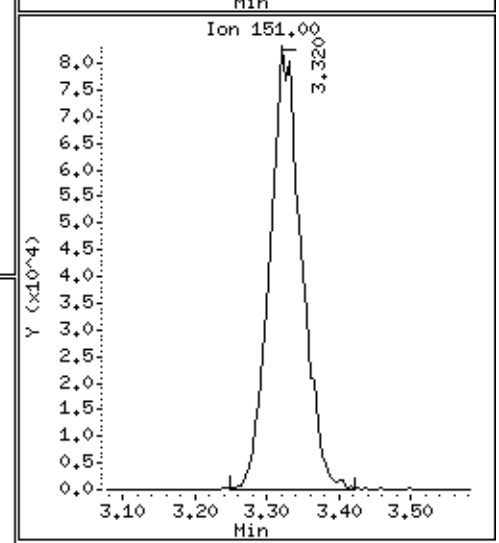
9 1,1,2-Trichlorotrifluoroethane

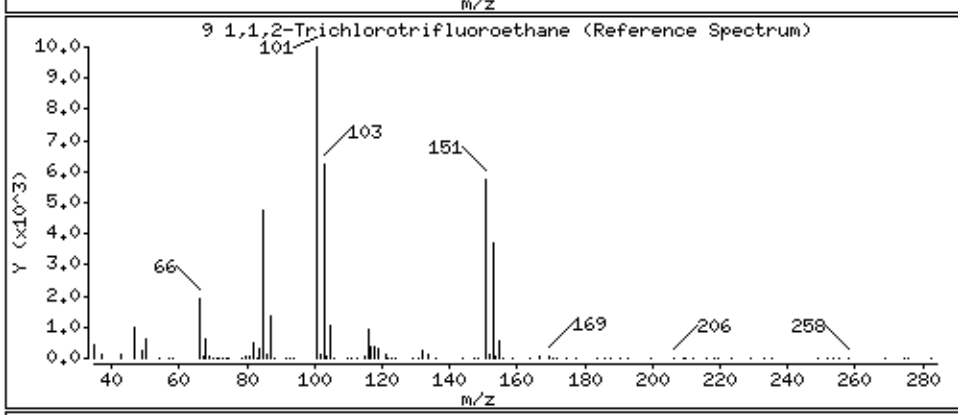
Concentration: 43.7 ug/L

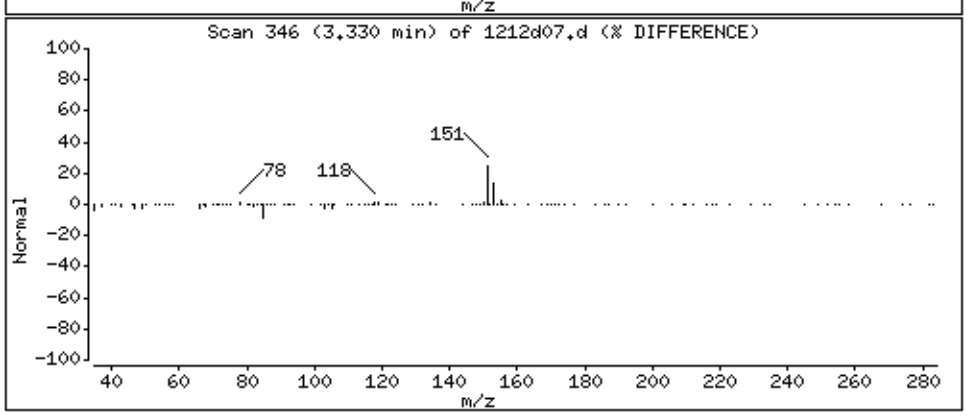












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

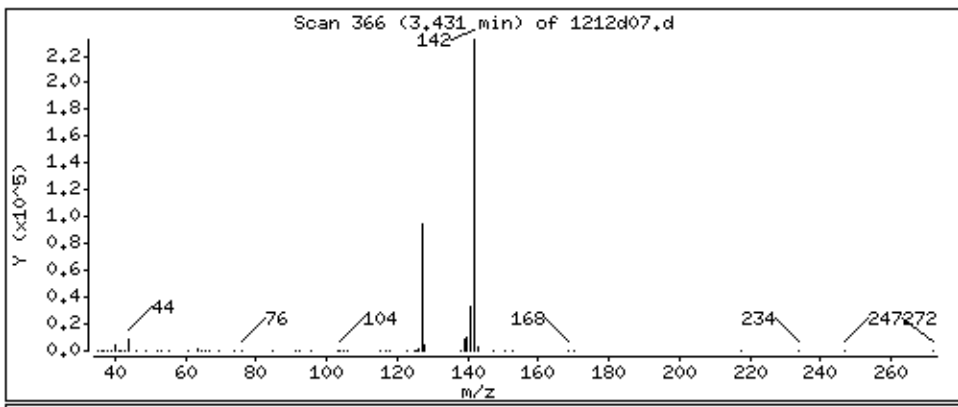
Operator: GEM

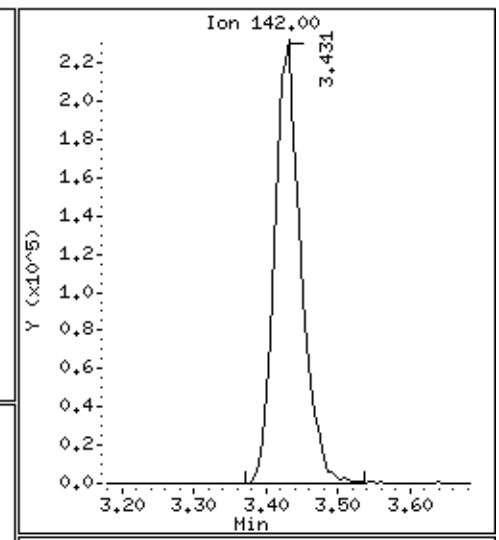
Column phase: RTX VMS 30m

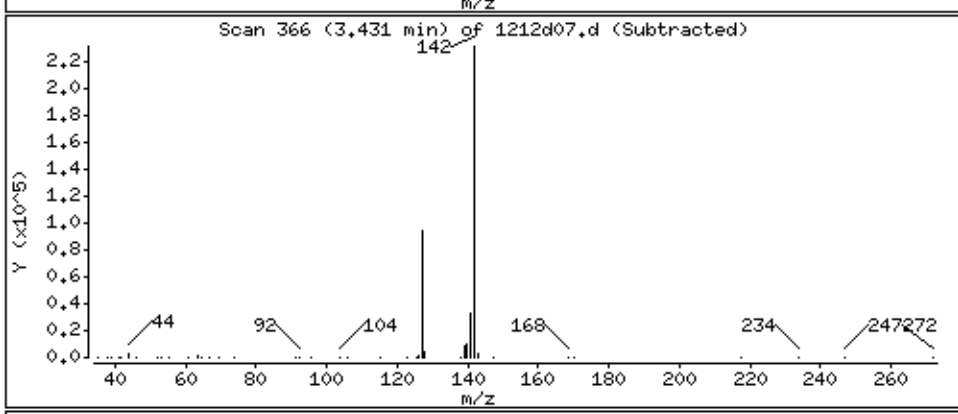
Column diameter: 0.25

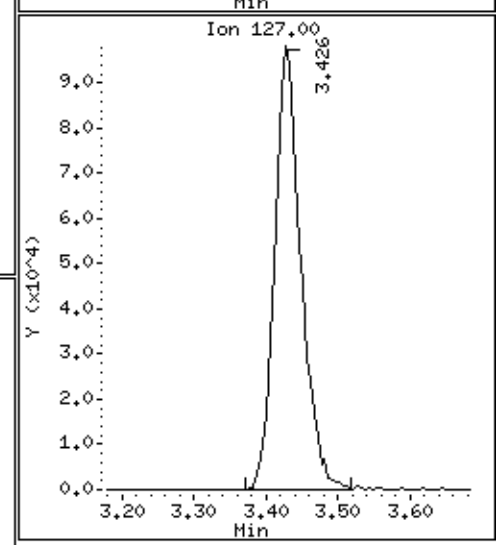
10 Iodomethane

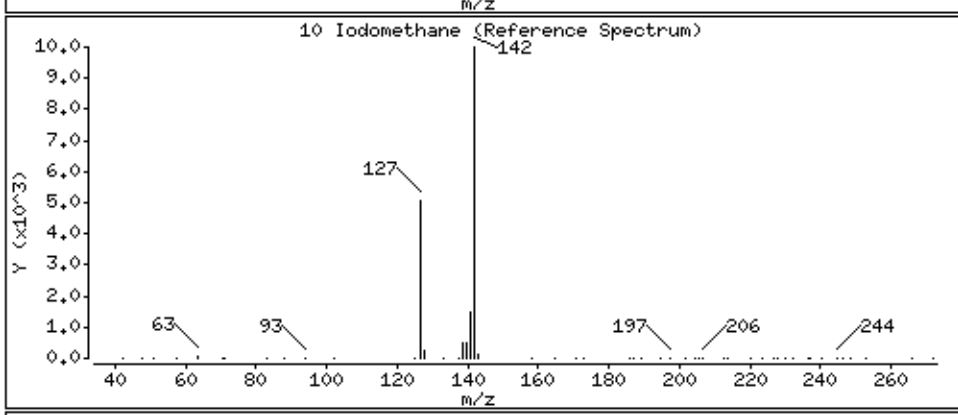
Concentration: 45.9 ug/L

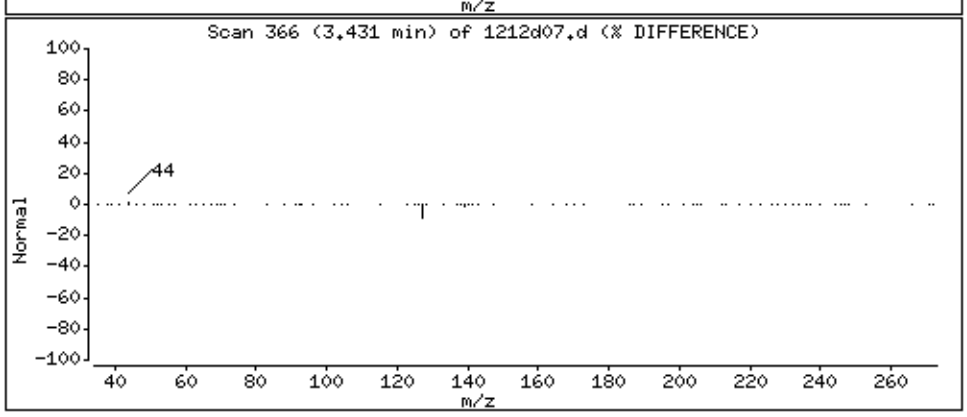












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

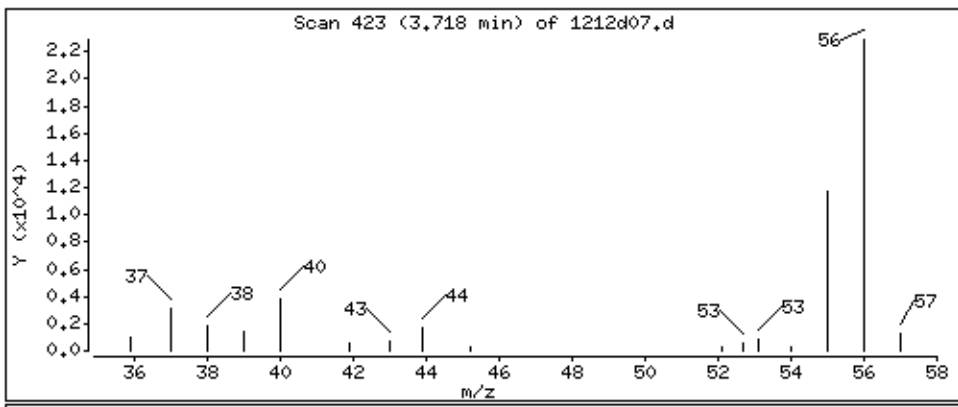
Operator: GEM

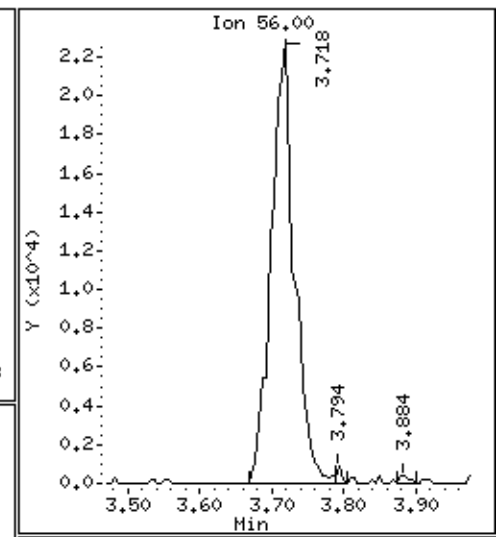
Column phase: RTX VMS 30m

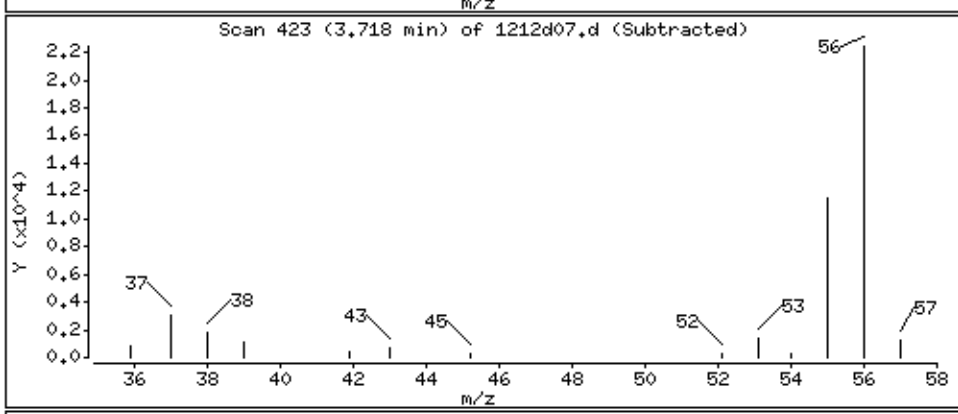
Column diameter: 0.25

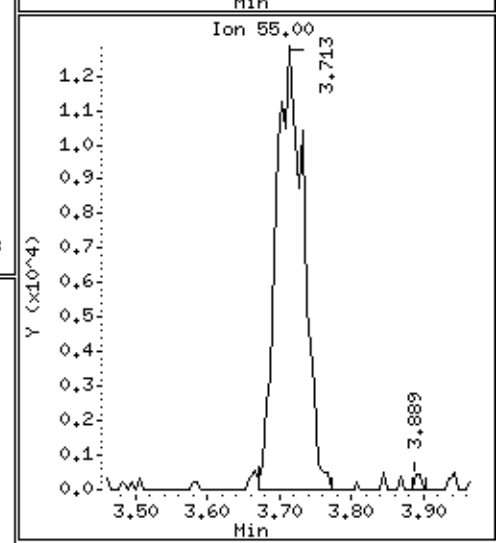
11 Acrolein

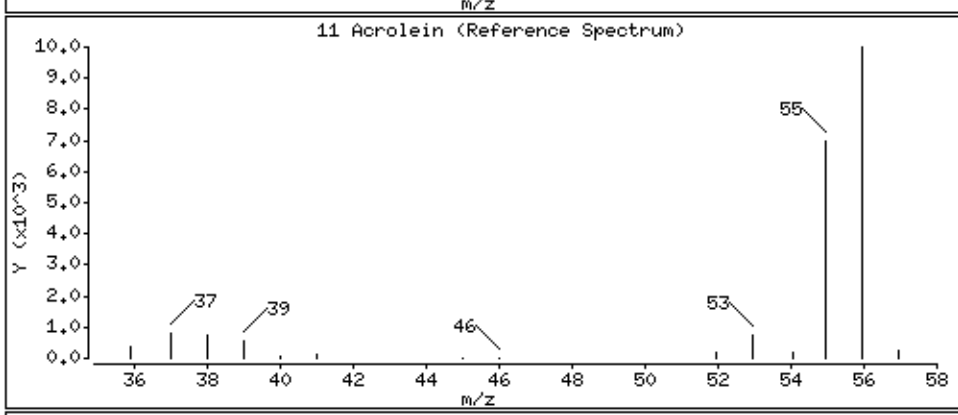
Concentration: 39.1 ug/L

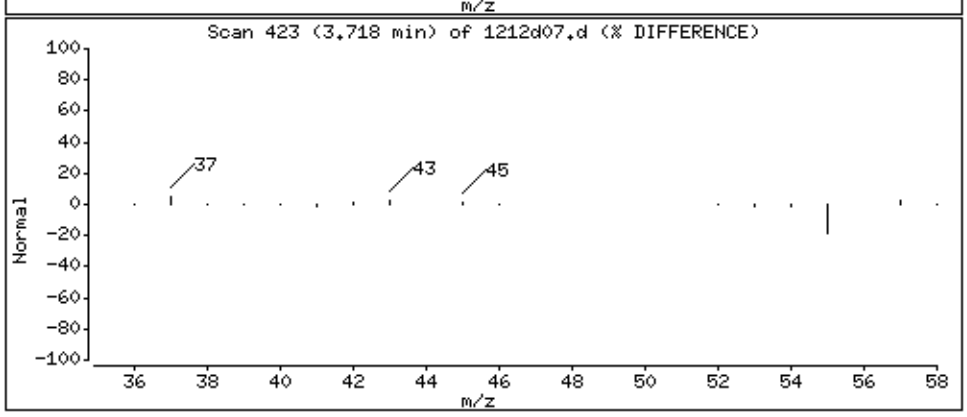












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

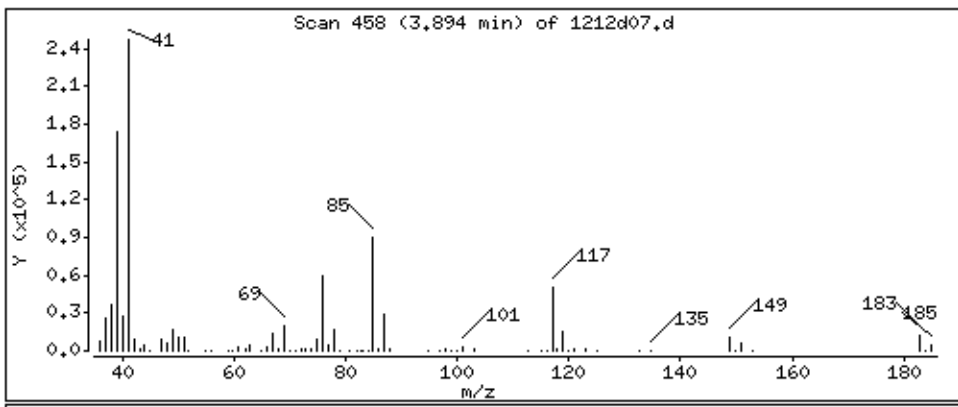
Operator: GEM

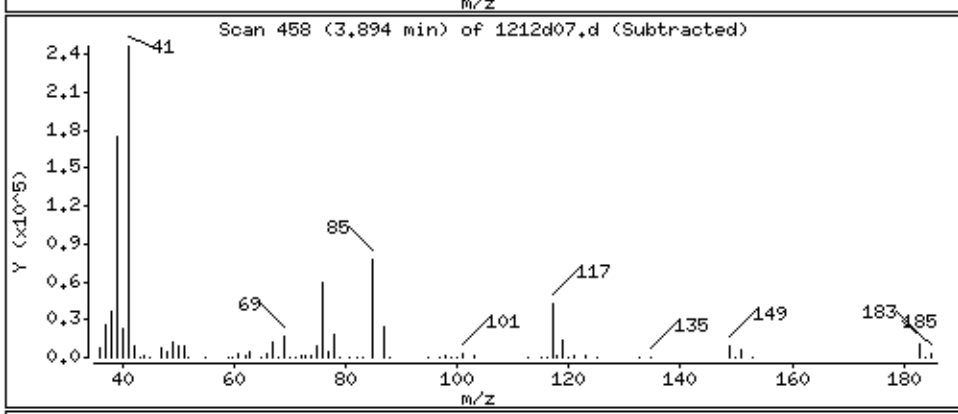
Column phase: RTX VMS 30m

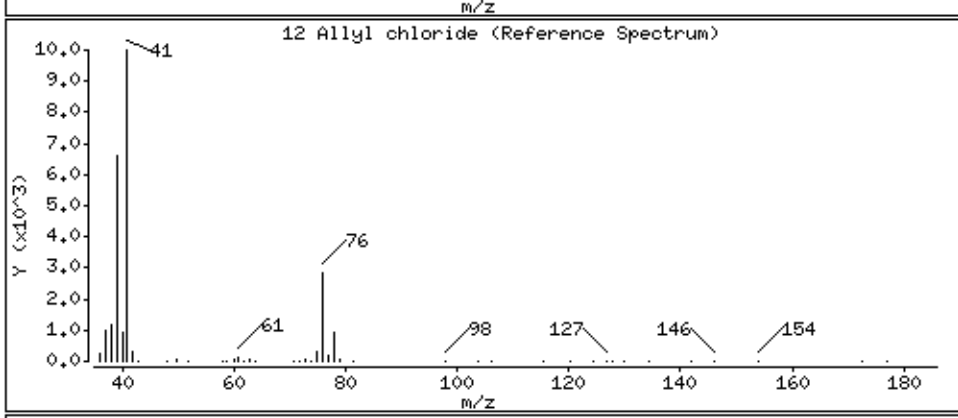
Column diameter: 0.25

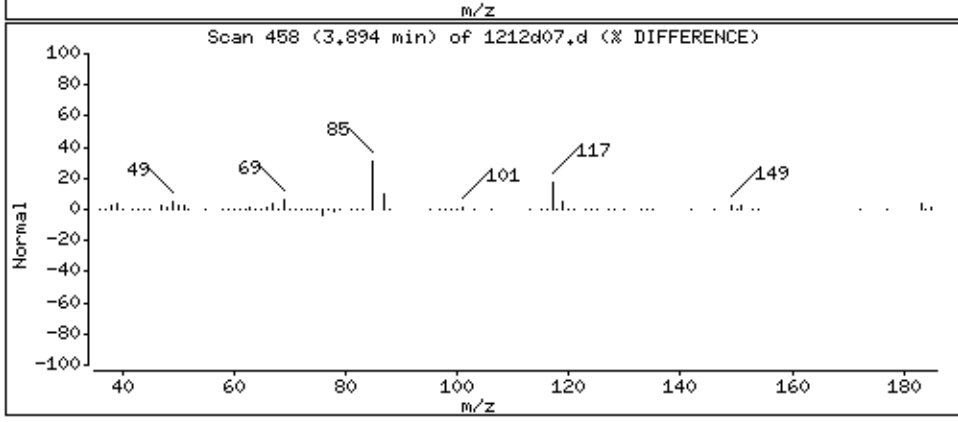
12 Allyl chloride

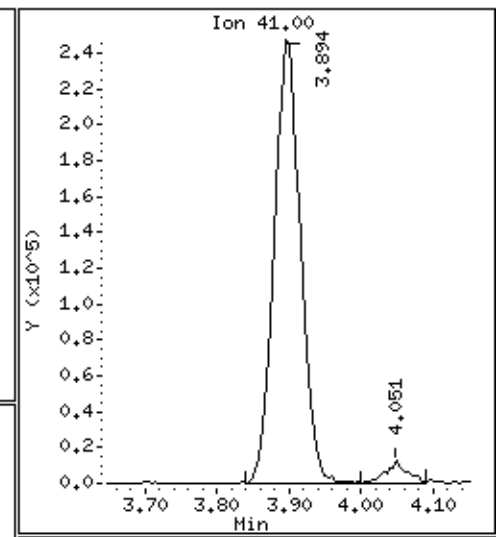
Concentration: 45.1 ug/L

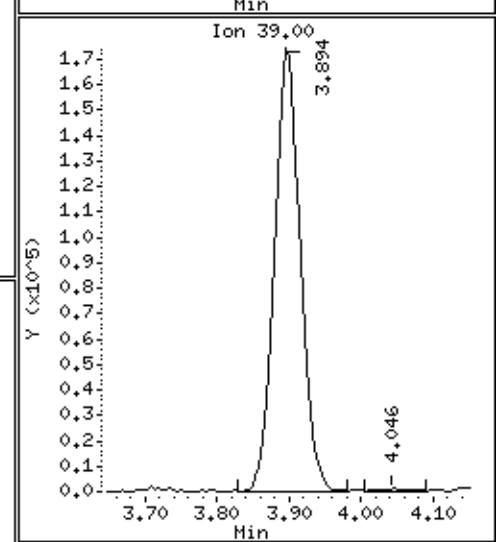


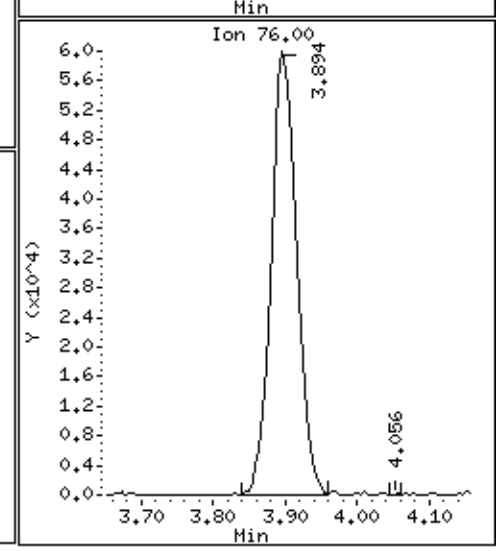












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

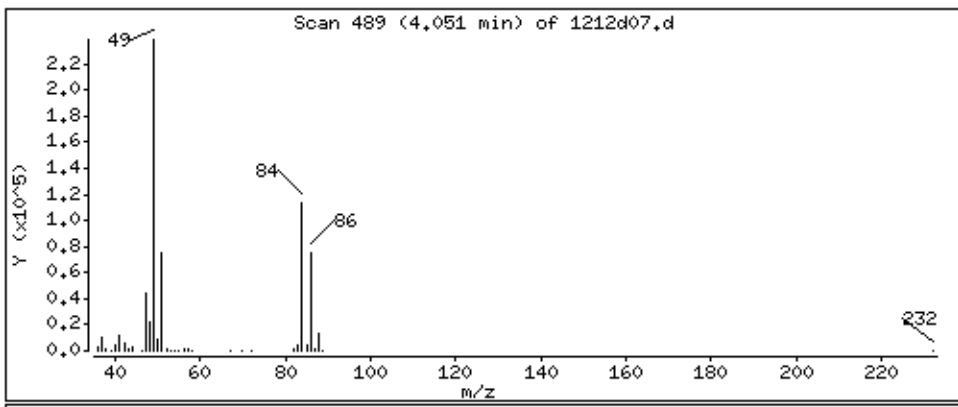
Operator: GEM

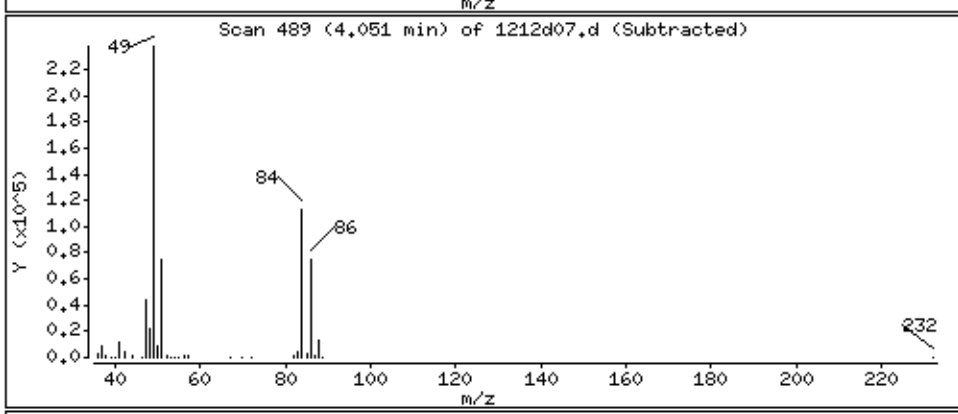
Column phase: RTX VMS 30m

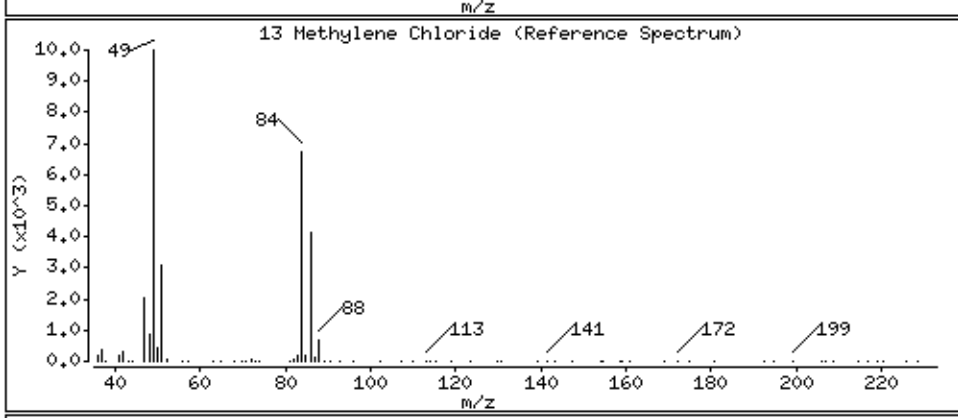
Column diameter: 0.25

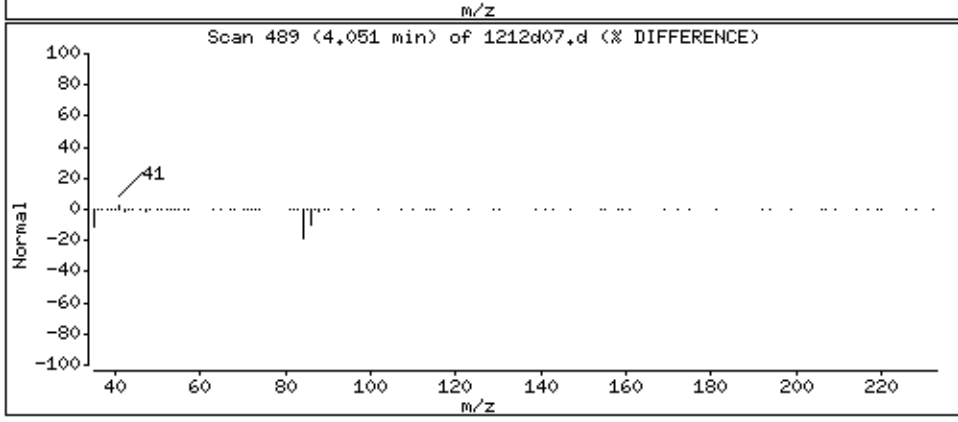
13 Methylene Chloride

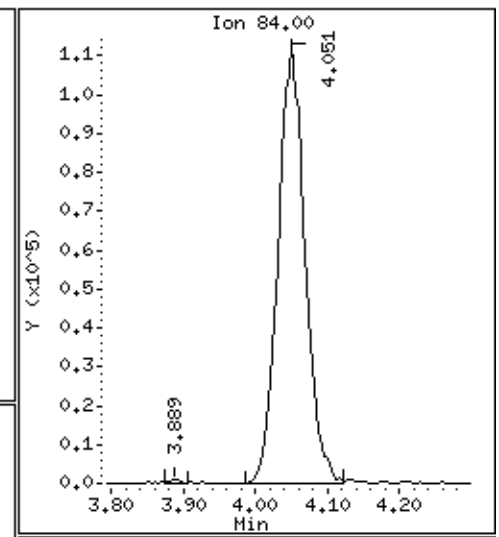
Concentration: 44.0 ug/L

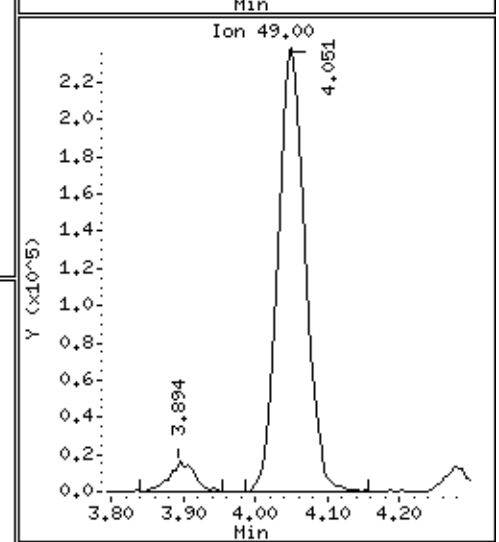


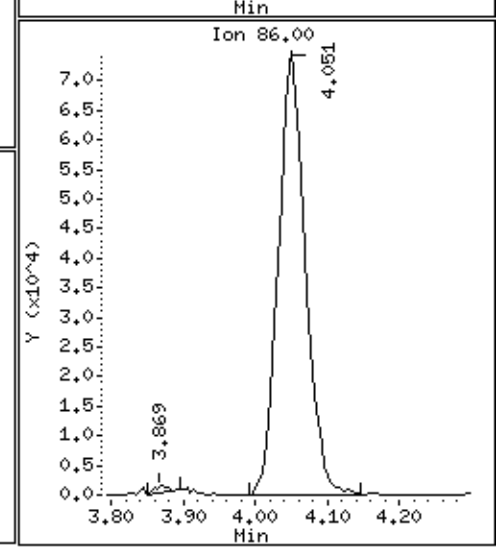












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

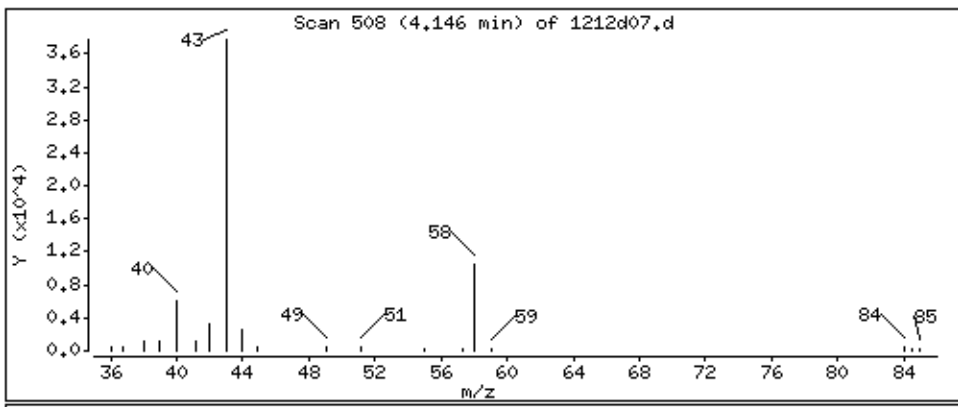
Operator: GEM

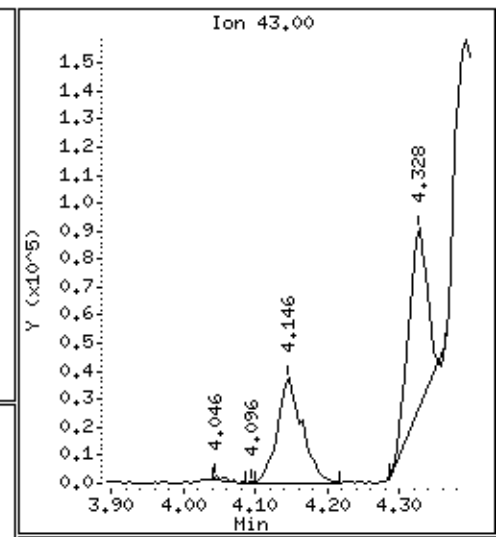
Column phase: RTX VMS 30m

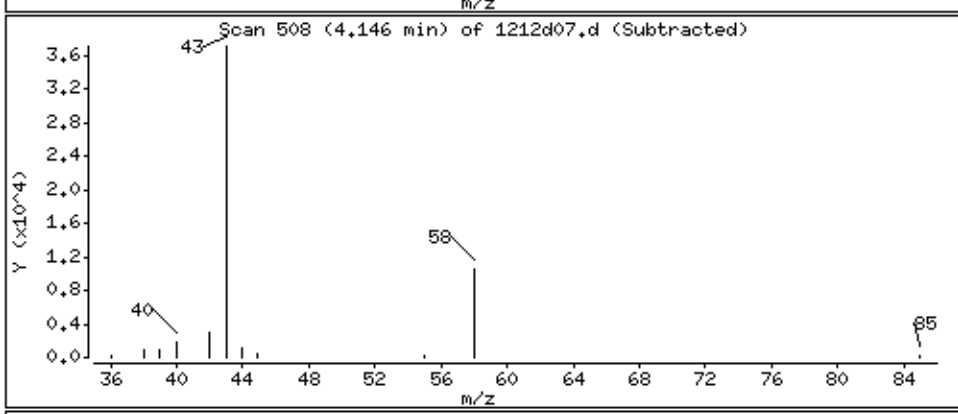
Column diameter: 0.25

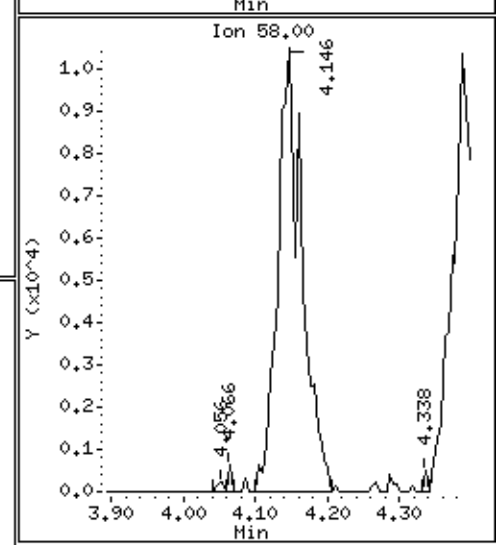
14 Acetone

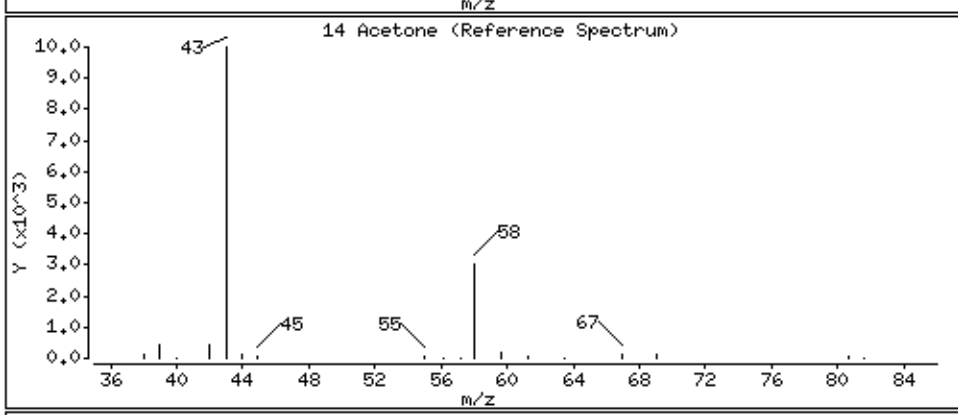
Concentration: 52.3 ug/L

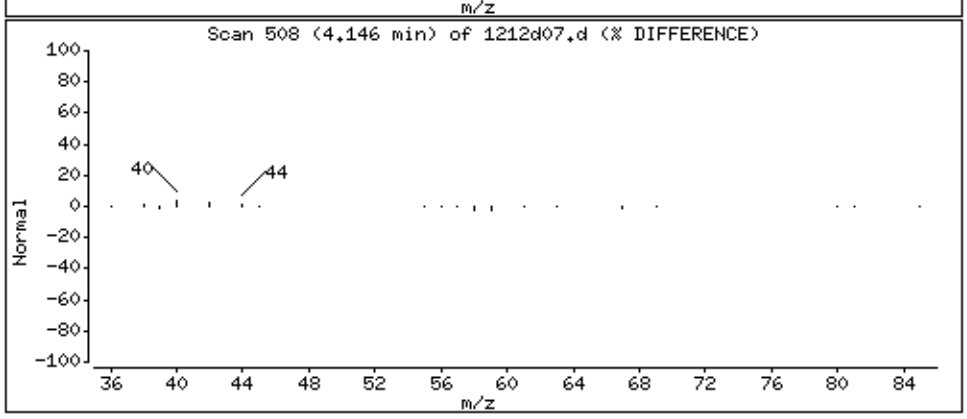












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

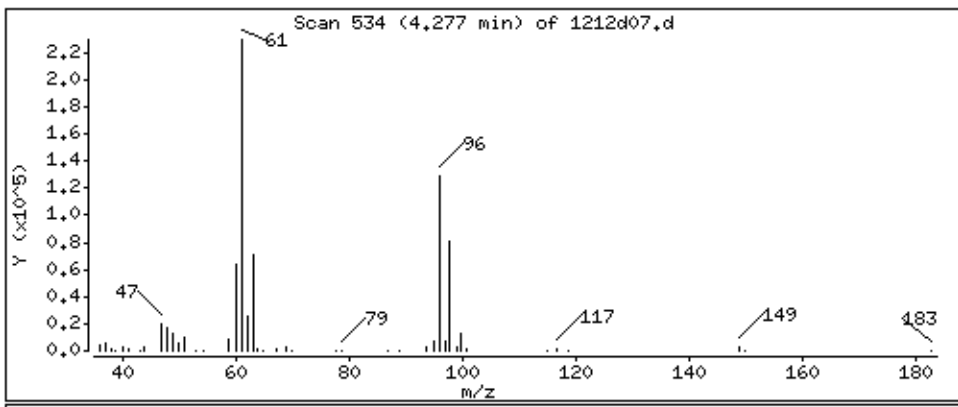
Operator: GEM

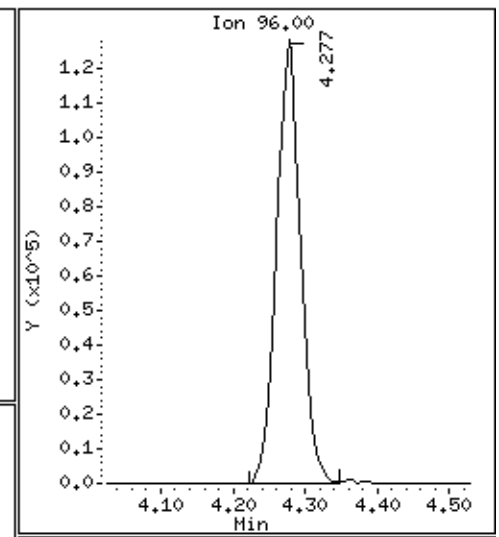
Column phase: RTX VMS 30m

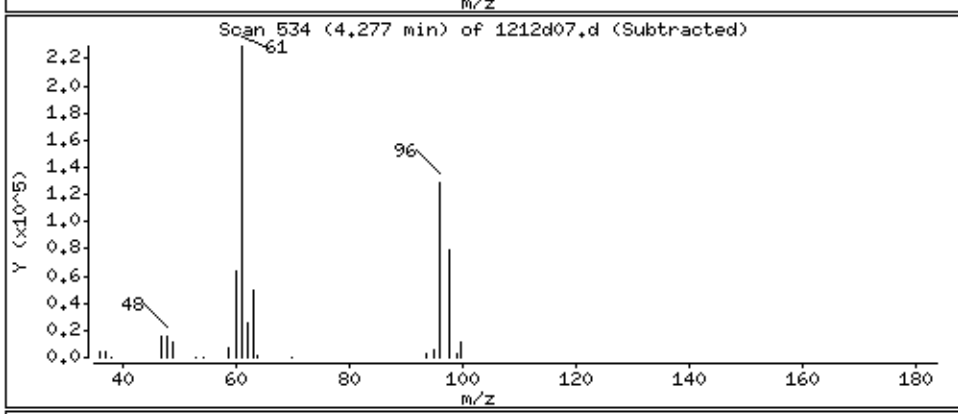
Column diameter: 0.25

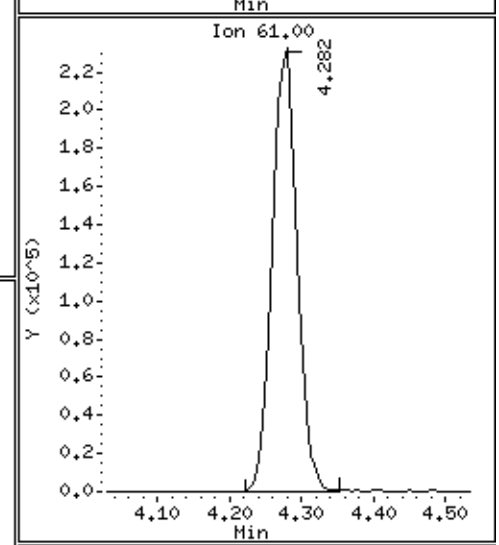
15 trans-1,2-Dichloroethene

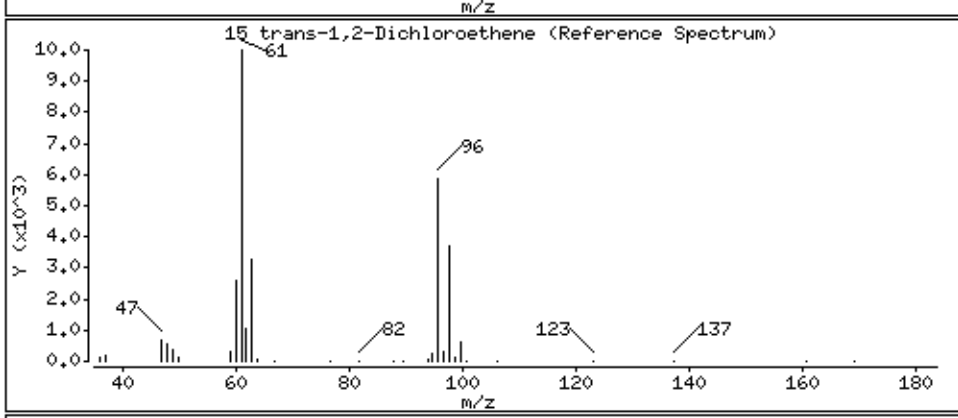
Concentration: 45.5 ug/L

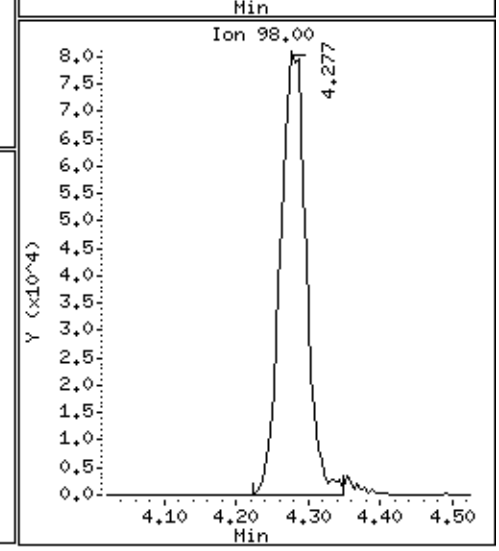


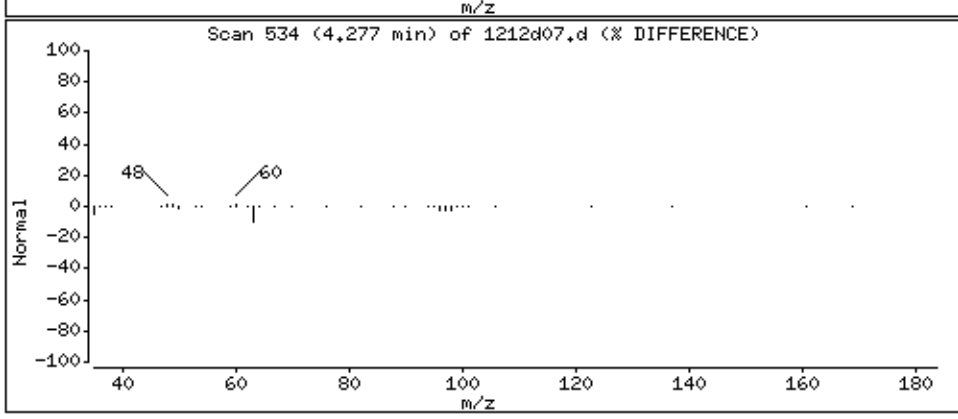












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

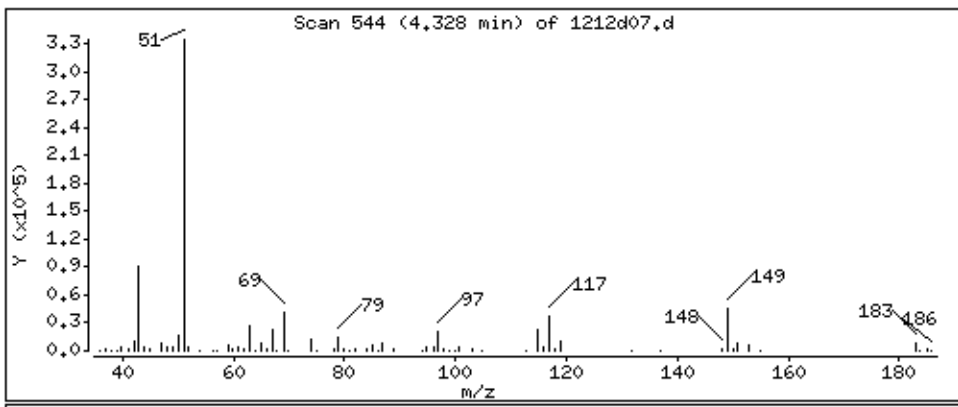
Operator: GEM

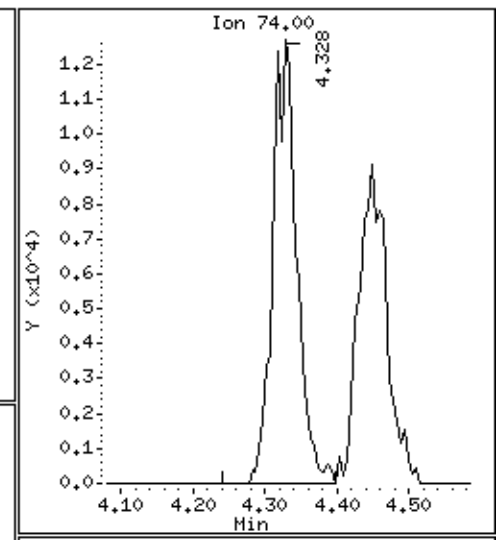
Column phase: RTX VMS 30m

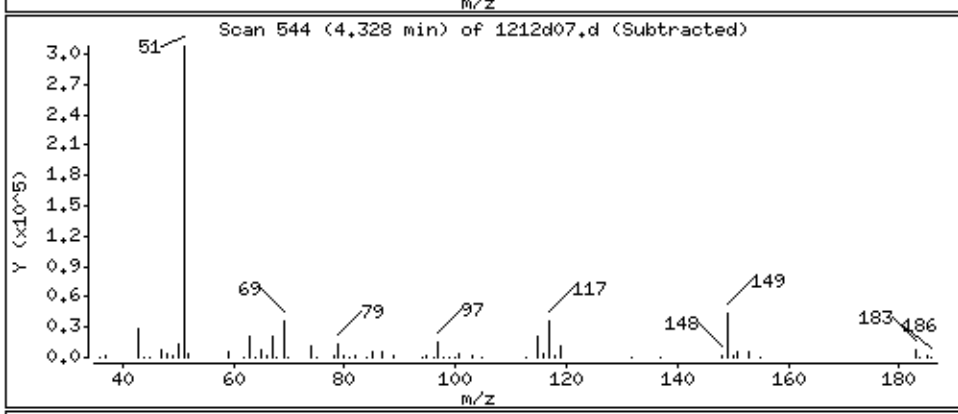
Column diameter: 0.25

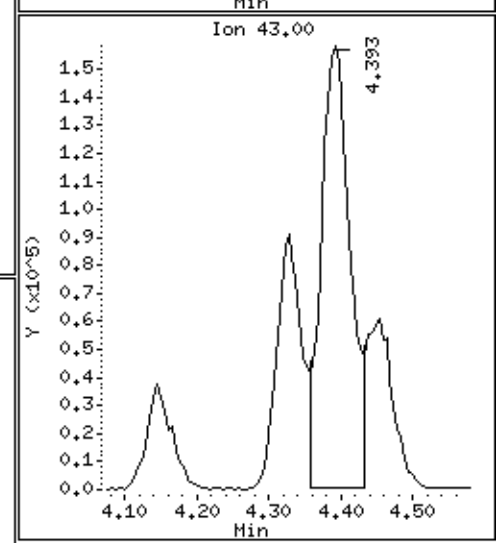
16 Methyl Acetate

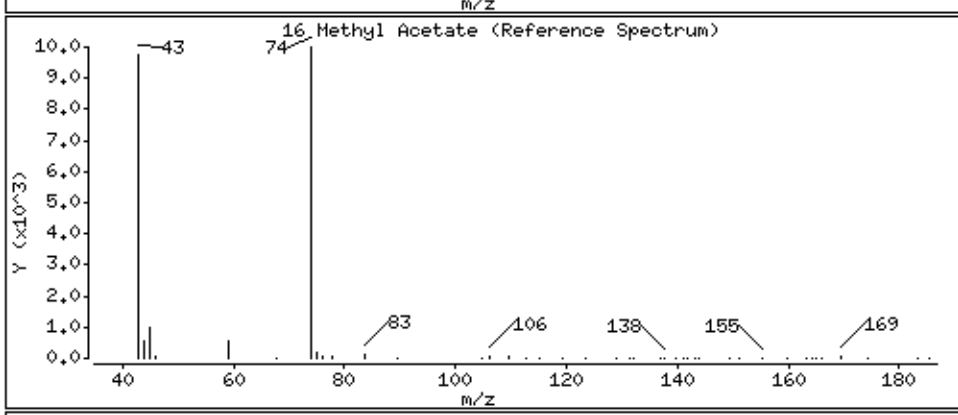
Concentration: 42.1 ug/L

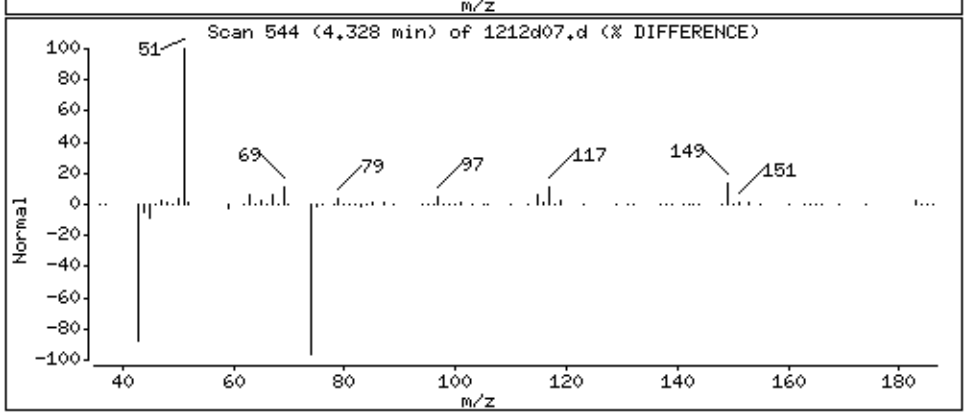












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

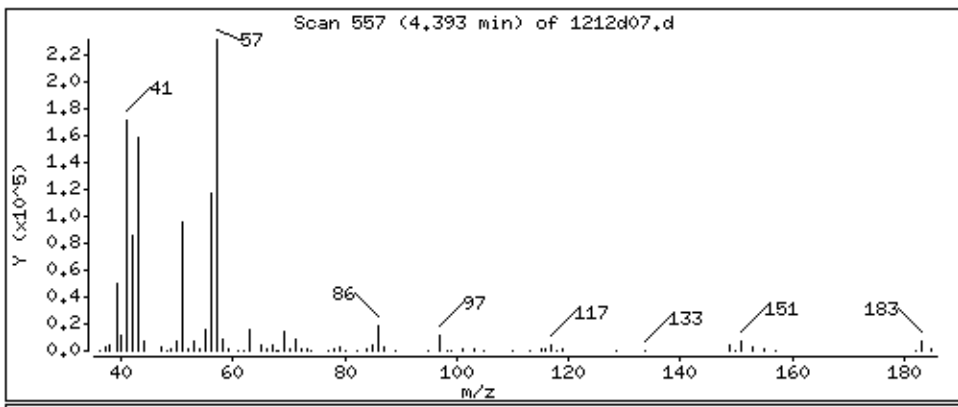
Operator: GEM

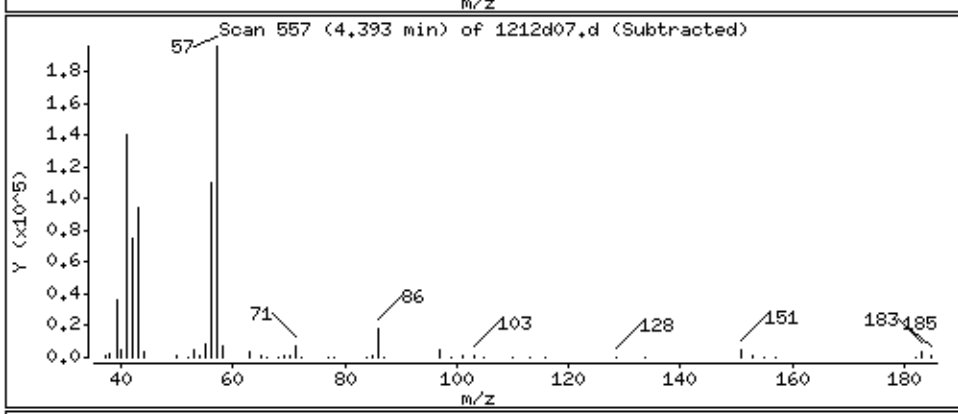
Column phase: RTX VMS 30m

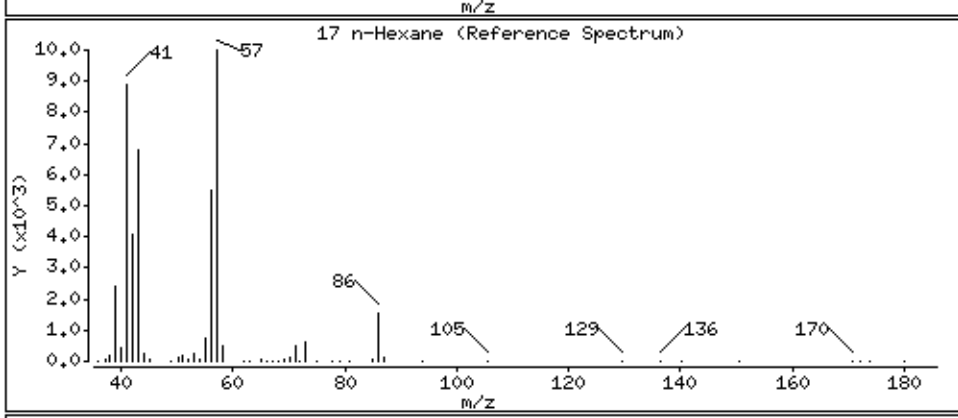
Column diameter: 0.25

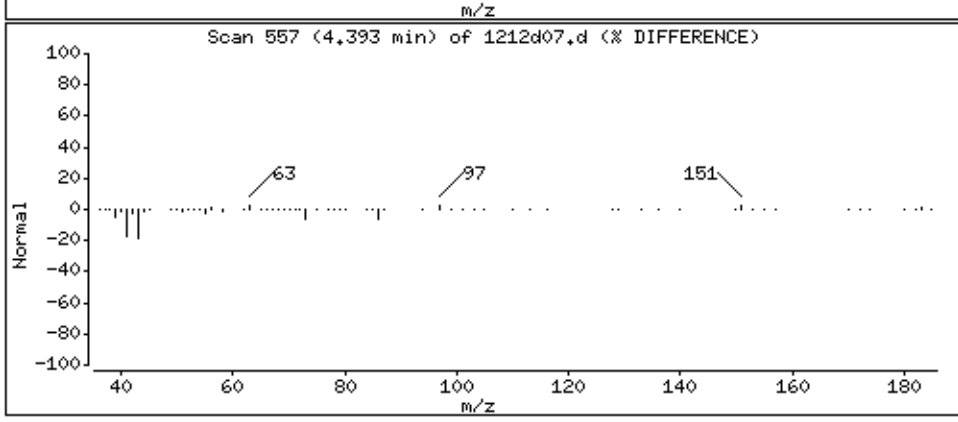
17 n-Hexane

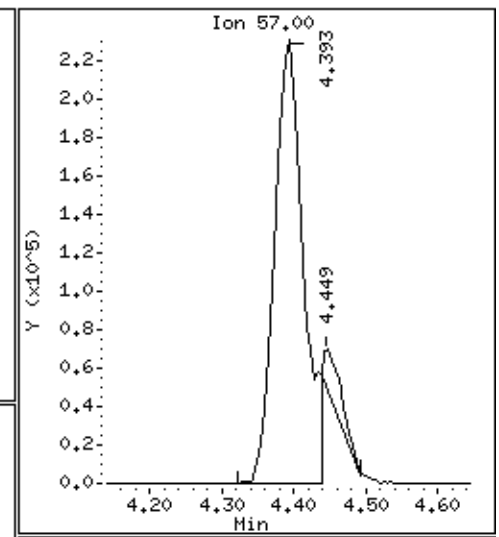
Concentration: 45.8 ug/L

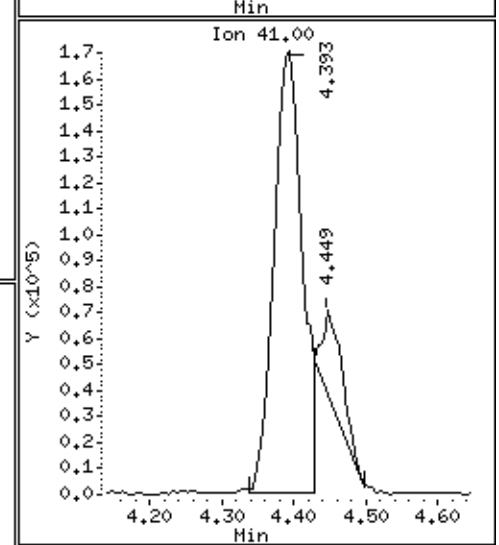


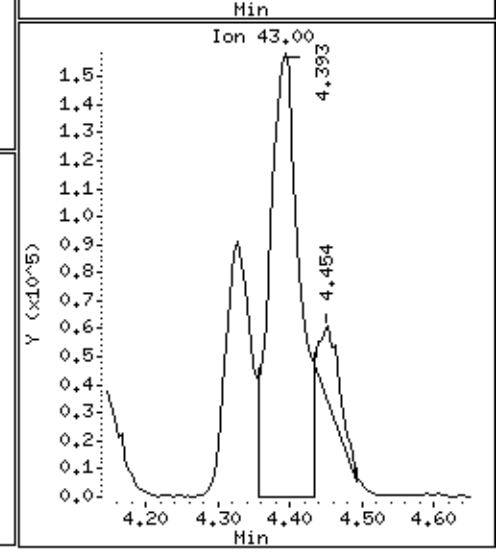












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

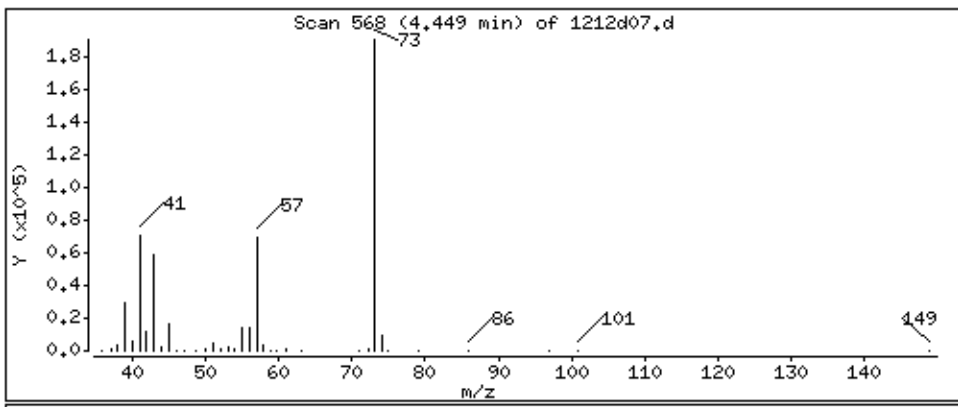
Operator: GEM

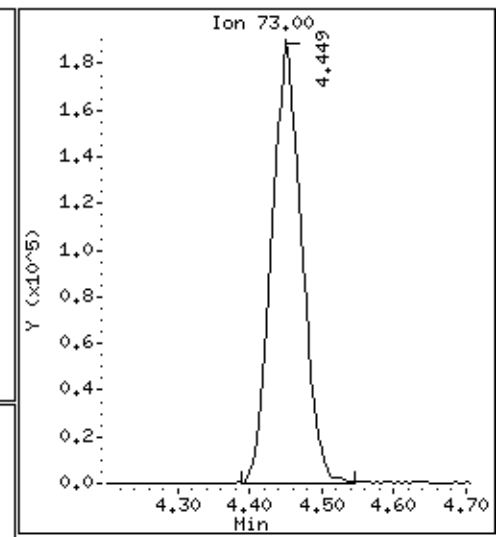
Column phase: RTX VMS 30m

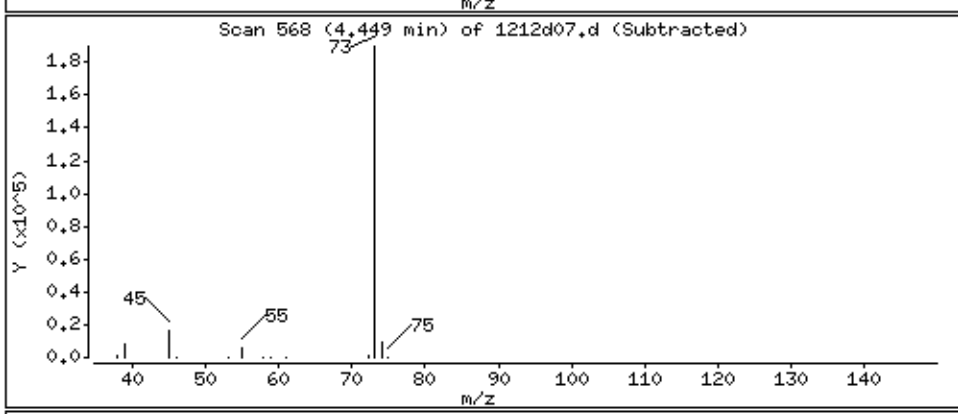
Column diameter: 0.25

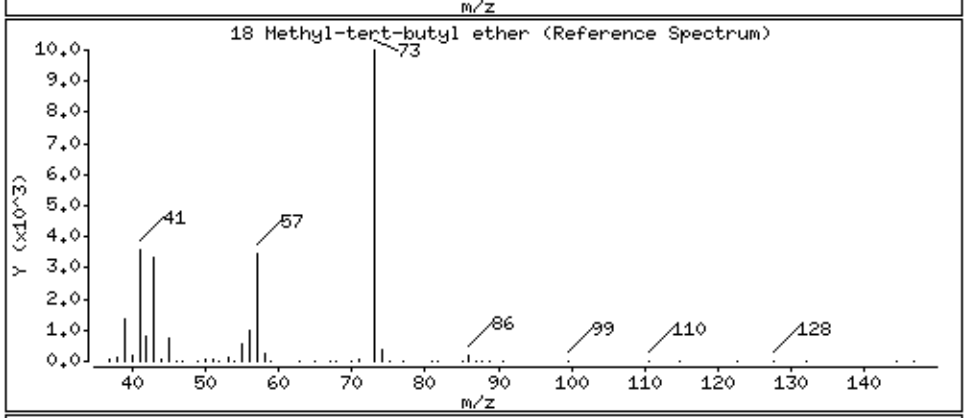
18 Methyl-tert-butyl ether

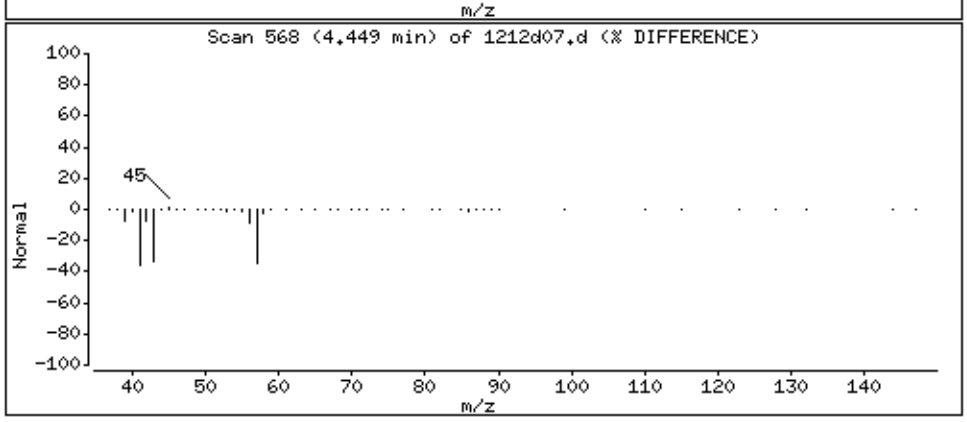
Concentration: 42.7 ug/L











Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

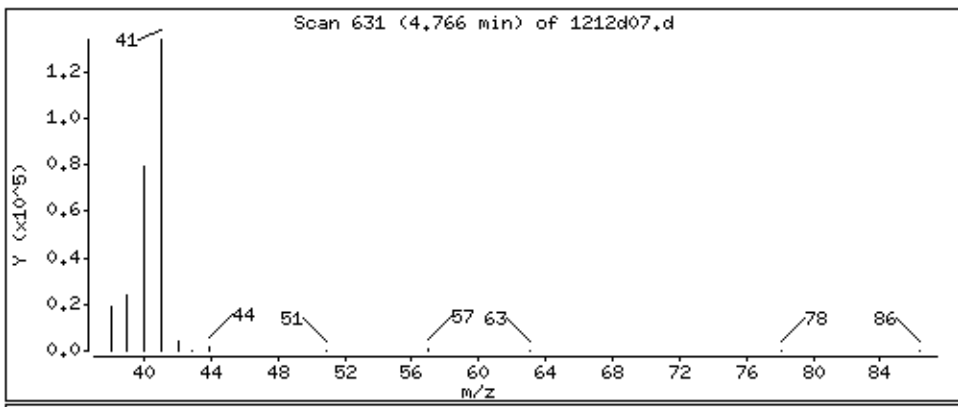
Operator: GEM

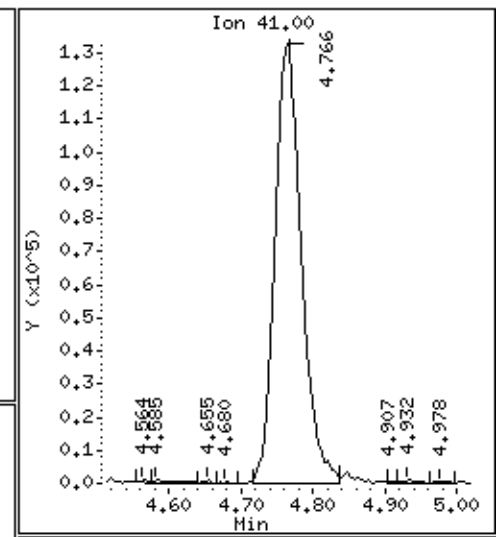
Column phase: RTX VMS 30m

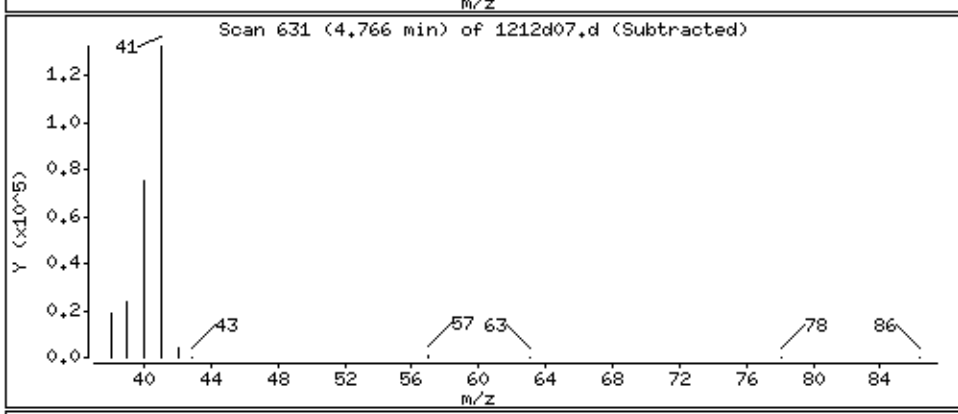
Column diameter: 0.25

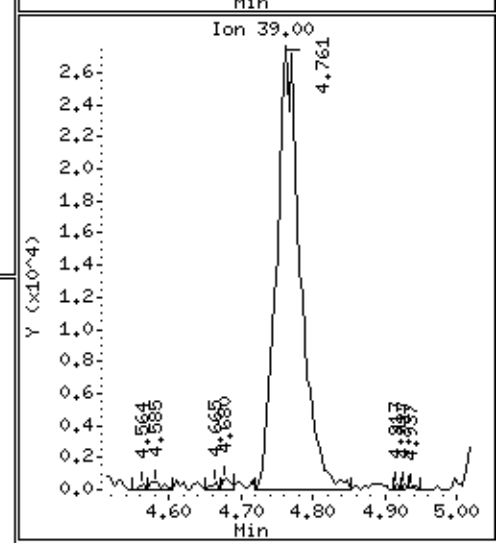
19 Acetonitrile

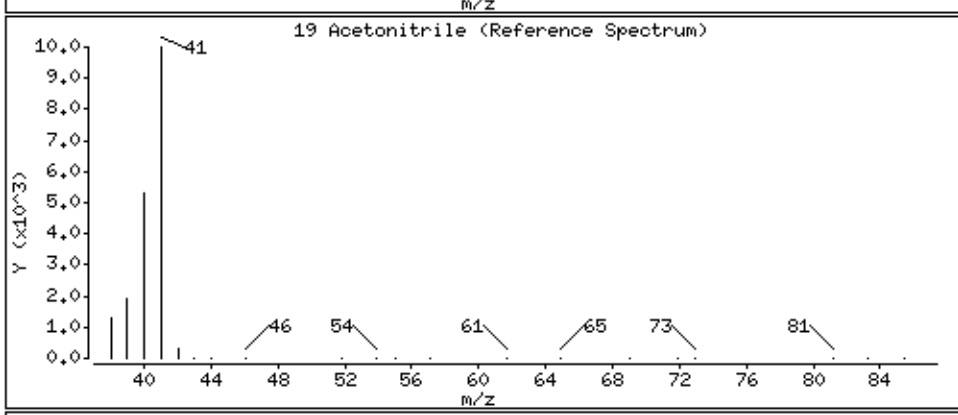
Concentration: 402 ug/L

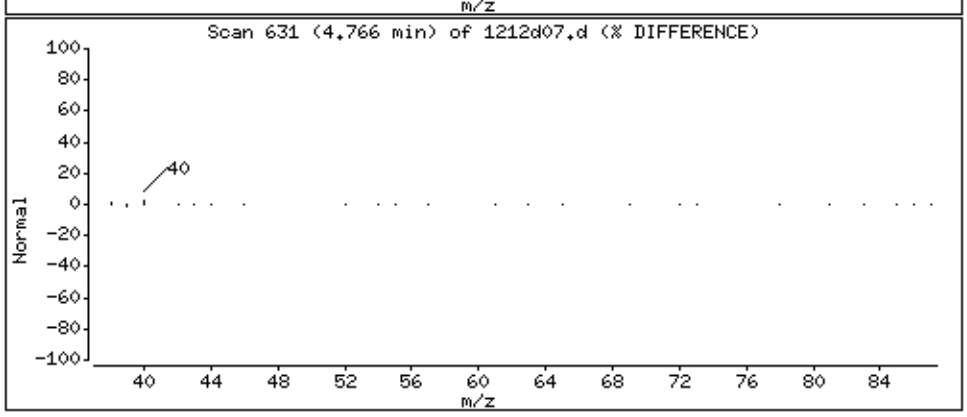












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

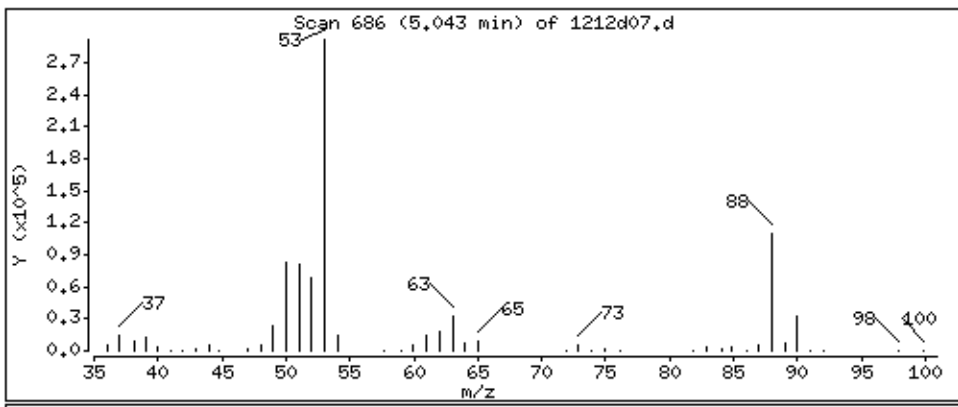
Operator: GEM

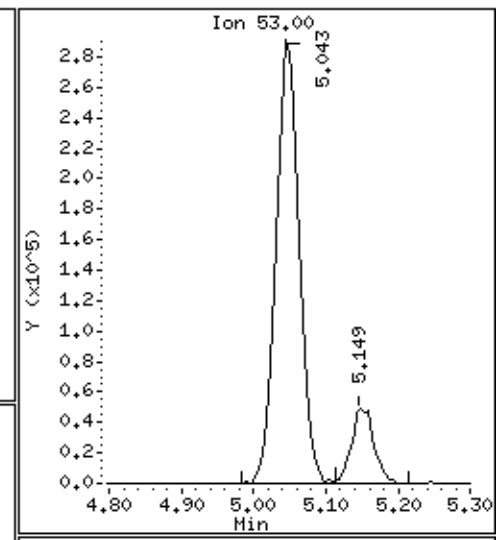
Column phase: RTX VMS 30m

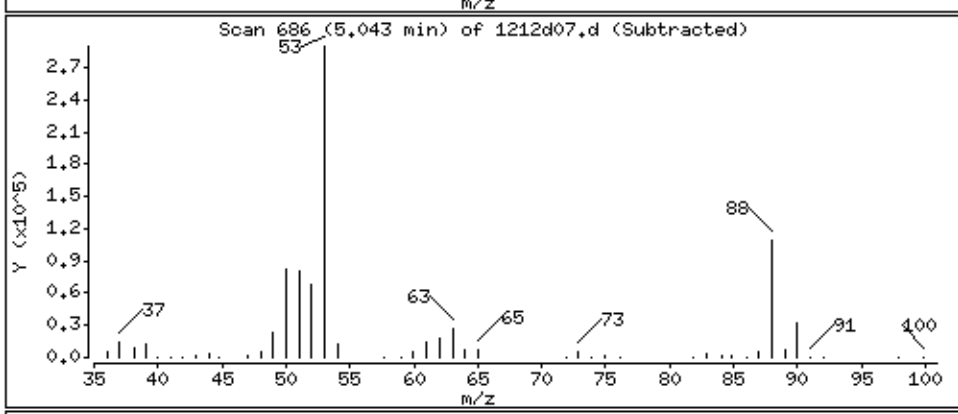
Column diameter: 0.25

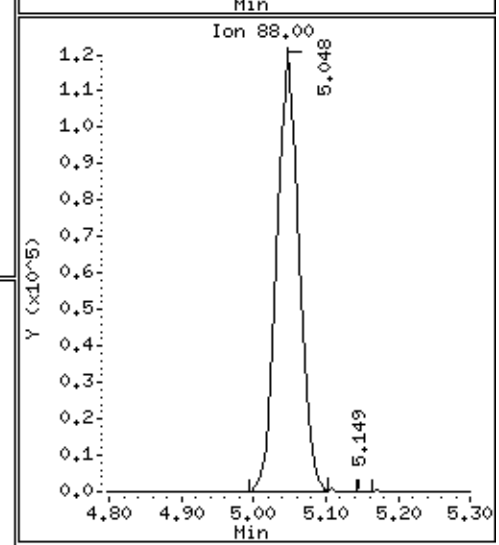
20 Chloroprene

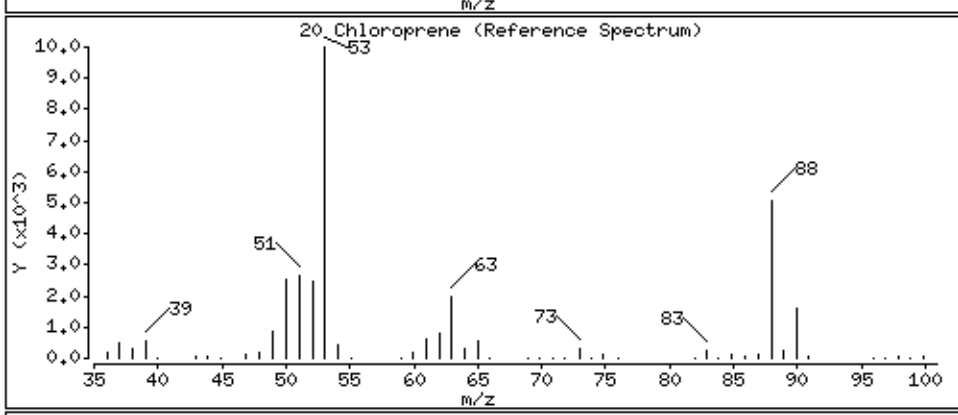
Concentration: 46.8 ug/L

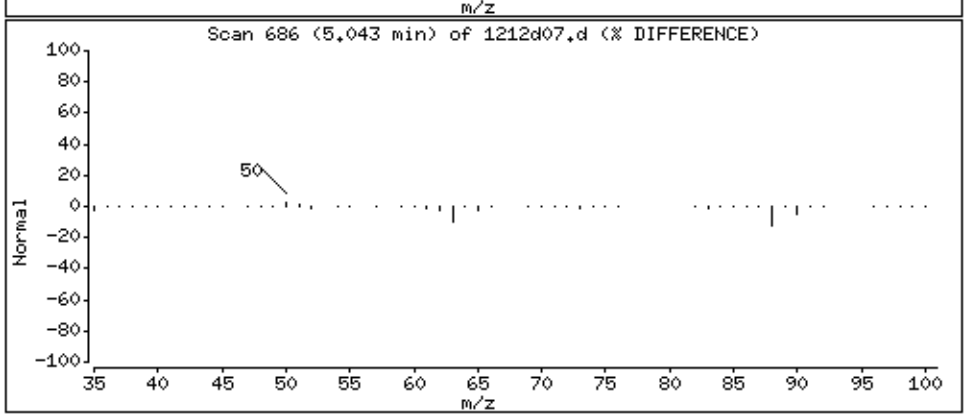












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

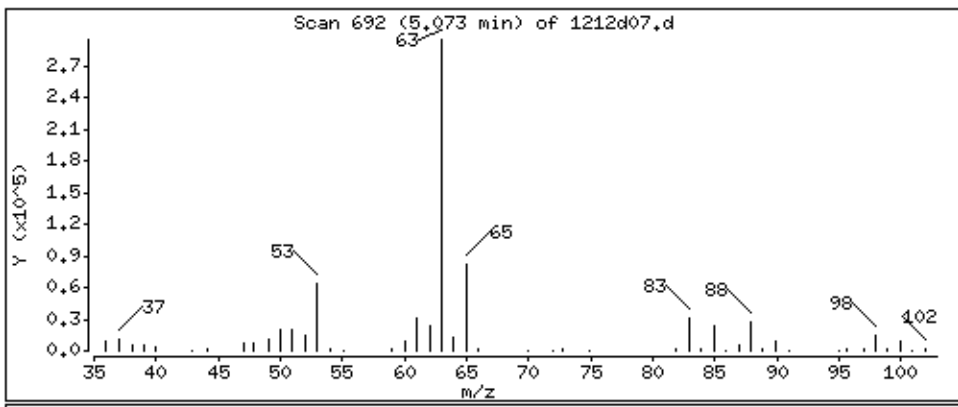
Operator: GEM

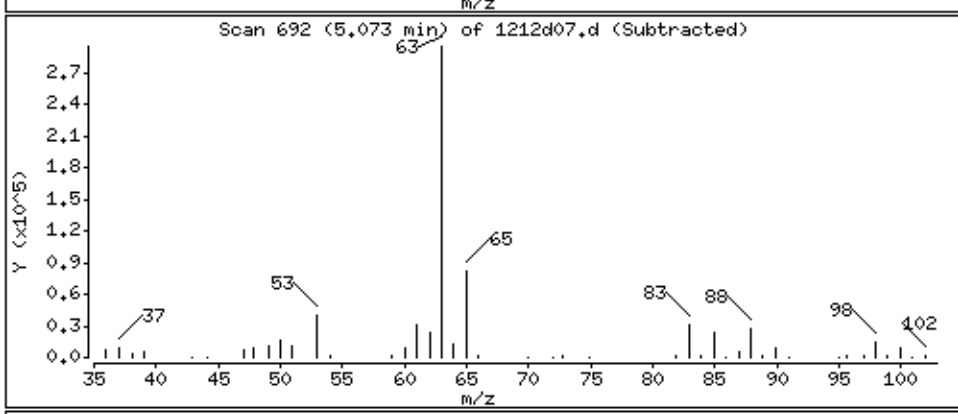
Column phase: RTX VMS 30m

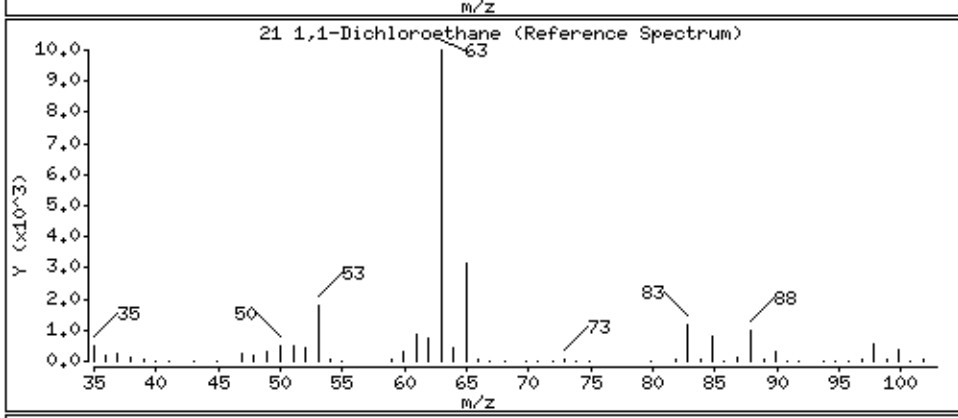
Column diameter: 0.25

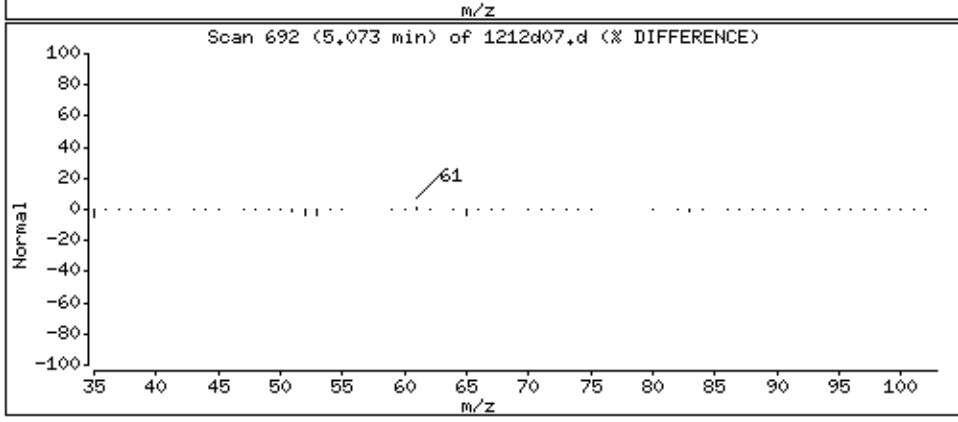
21 1,1-Dichloroethane

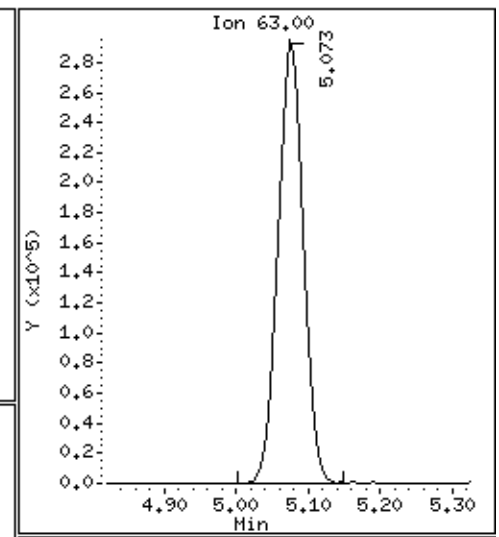
Concentration: 47.1 ug/L

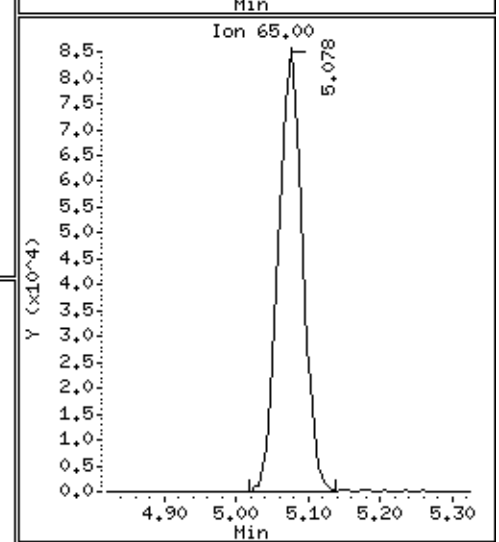


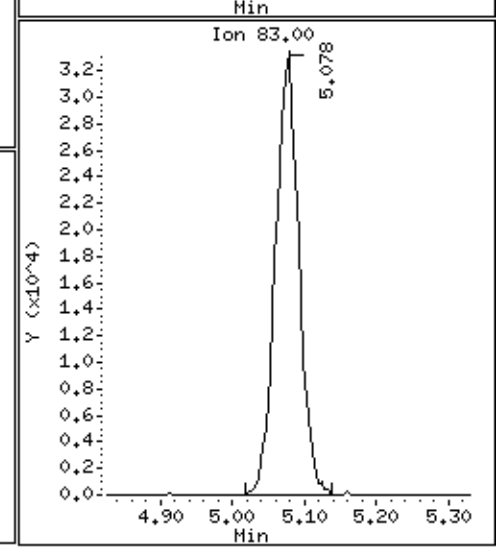












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

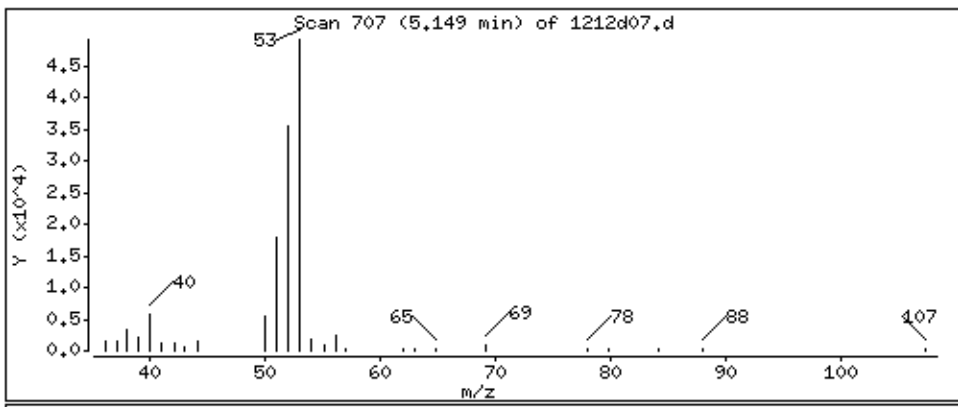
Operator: GEM

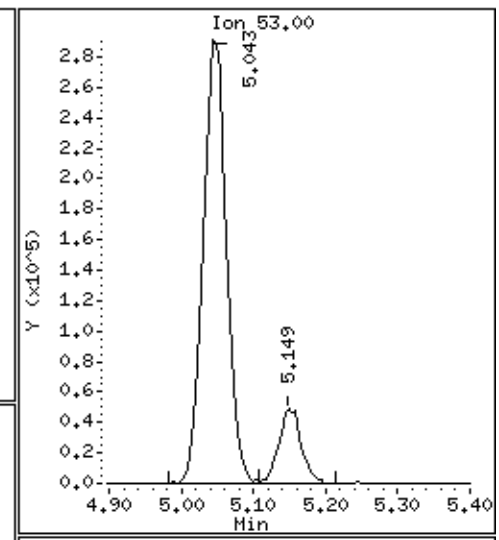
Column phase: RTX VMS 30m

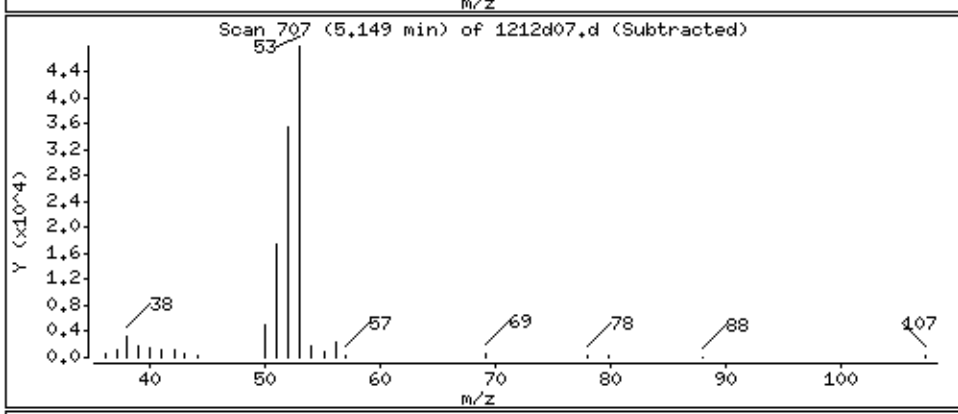
Column diameter: 0.25

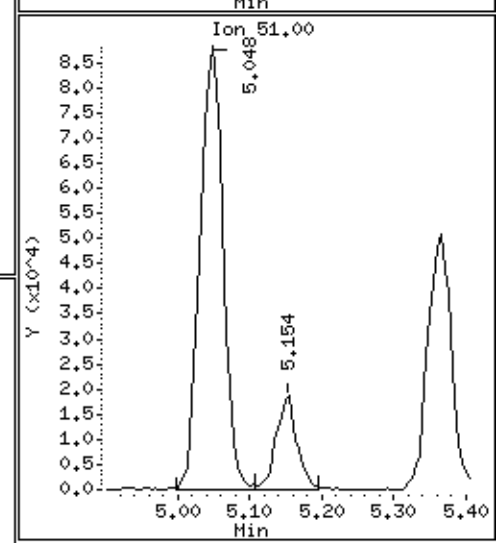
22 Acrylonitrile

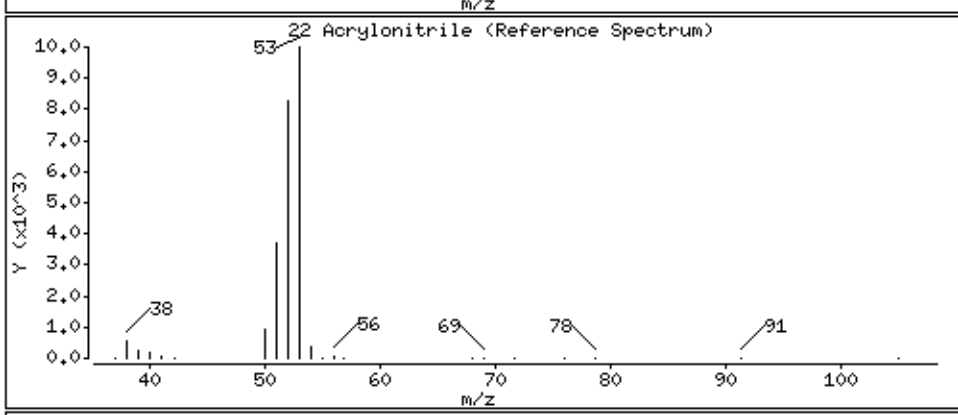
Concentration: 41.0 ug/L

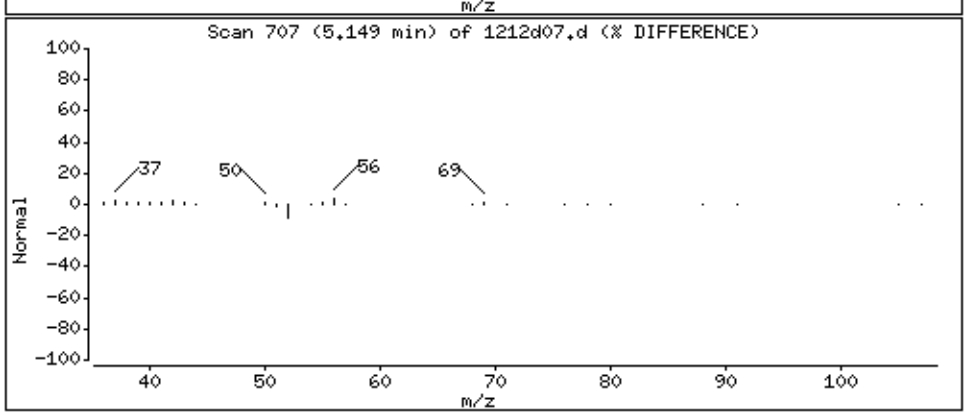












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

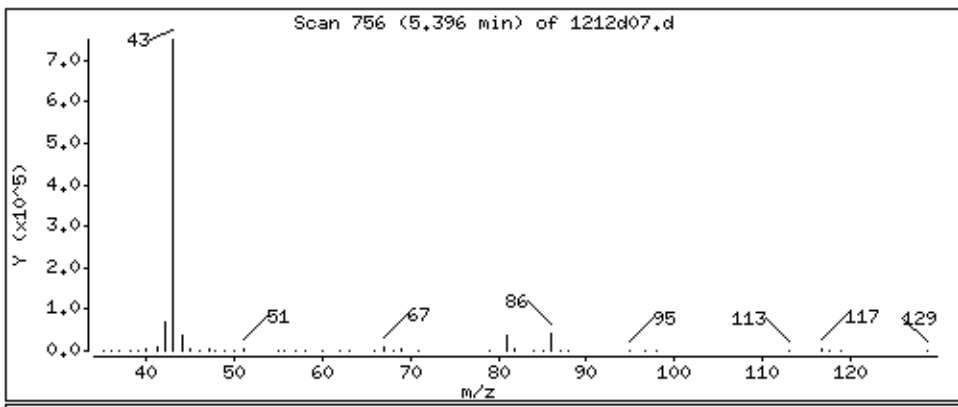
Operator: GEM

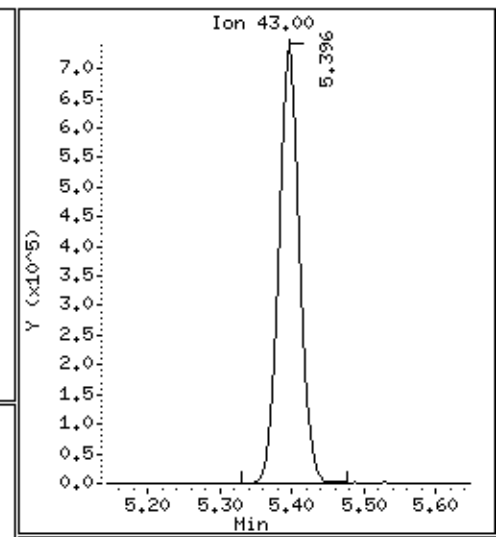
Column phase: RTX VMS 30m

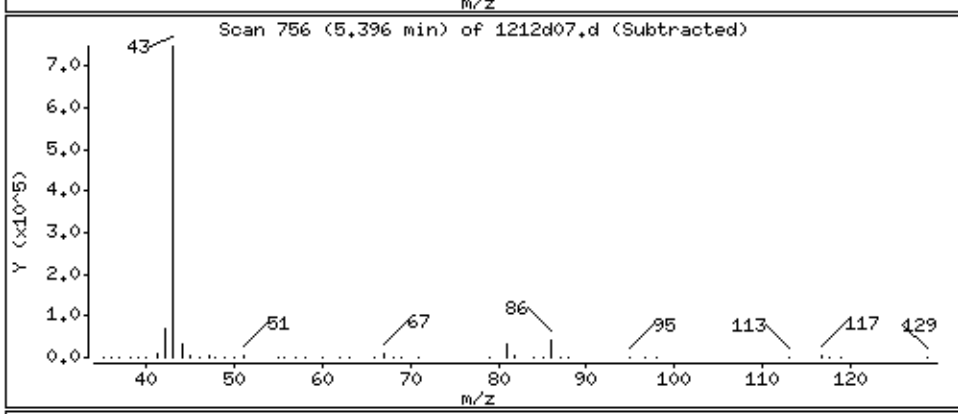
Column diameter: 0.25

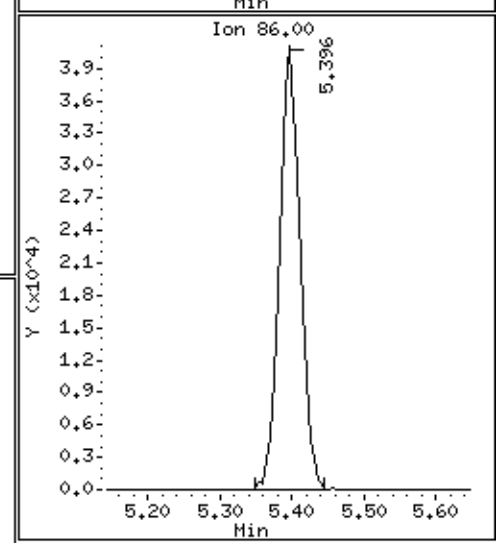
23 Vinyl acetate

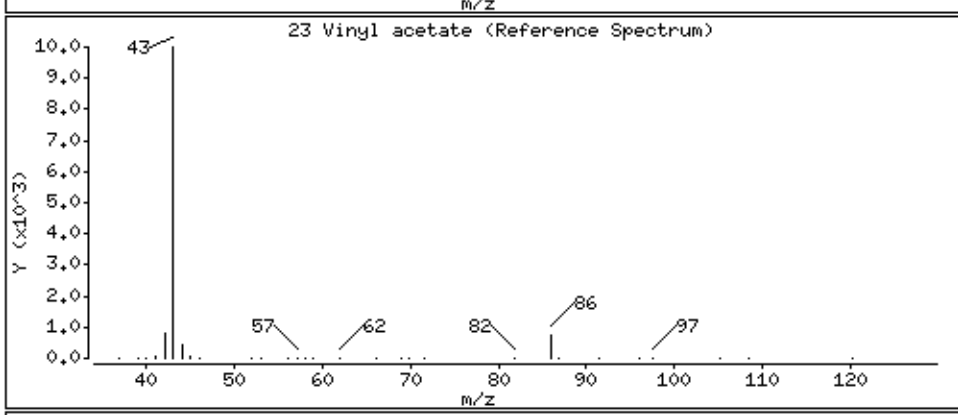
Concentration: 42.8 ug/L

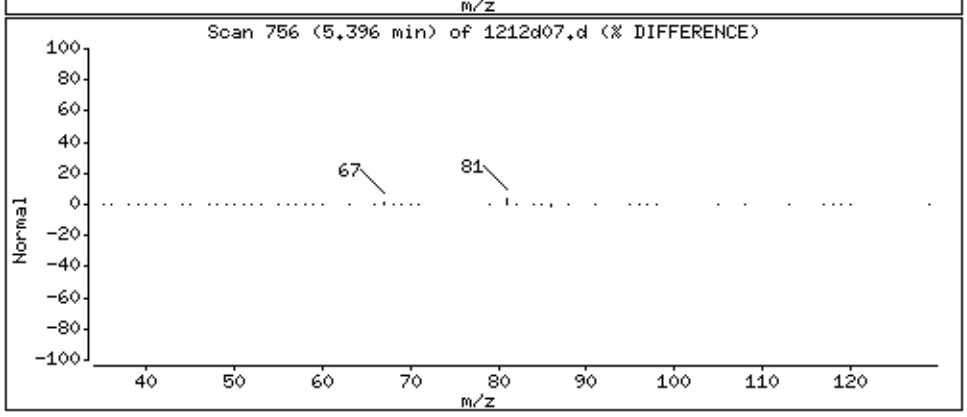












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

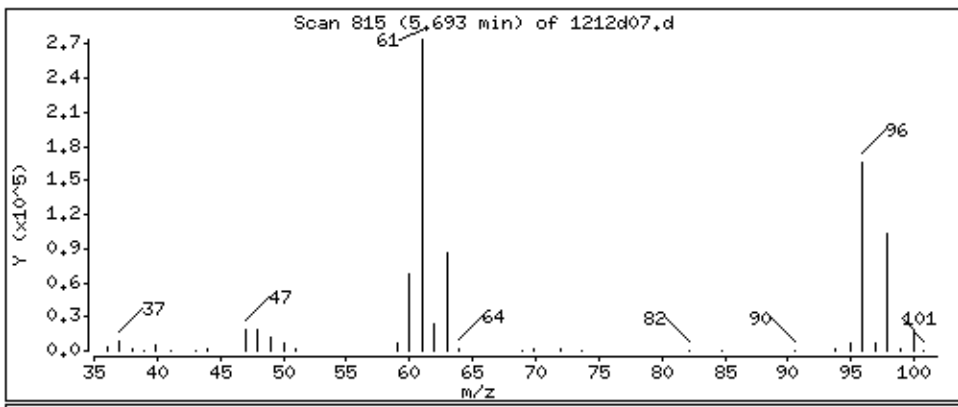
Operator: GEM

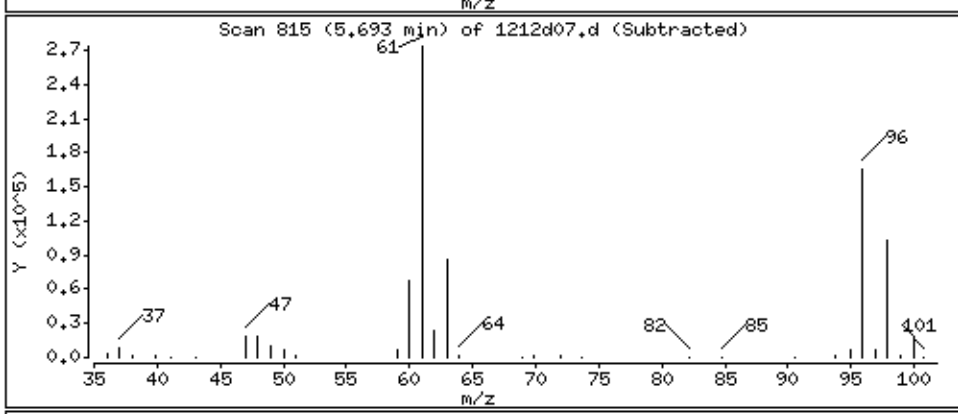
Column phase: RTX VMS 30m

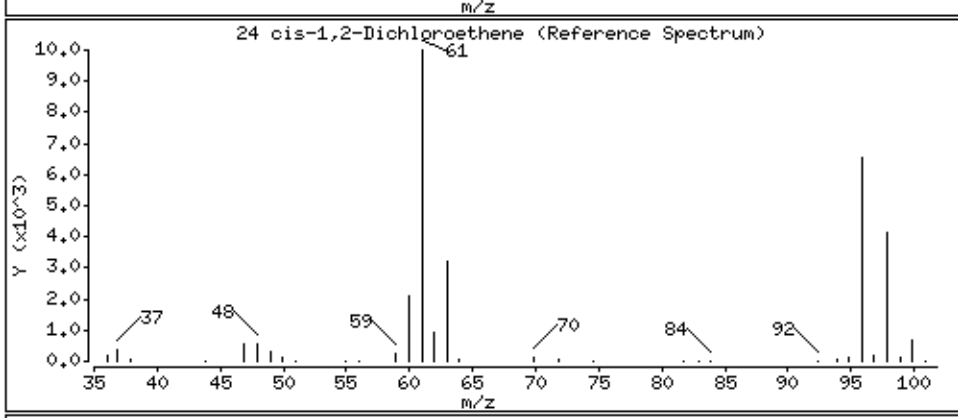
Column diameter: 0.25

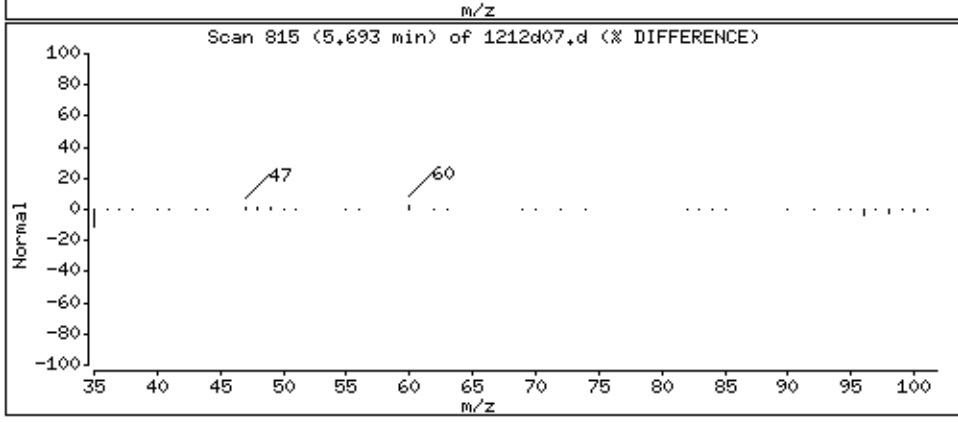
24 cis-1,2-Dichloroethene

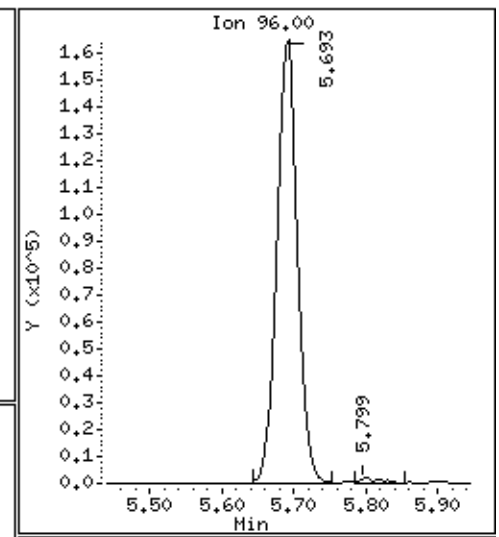
Concentration: 43.8 ug/L

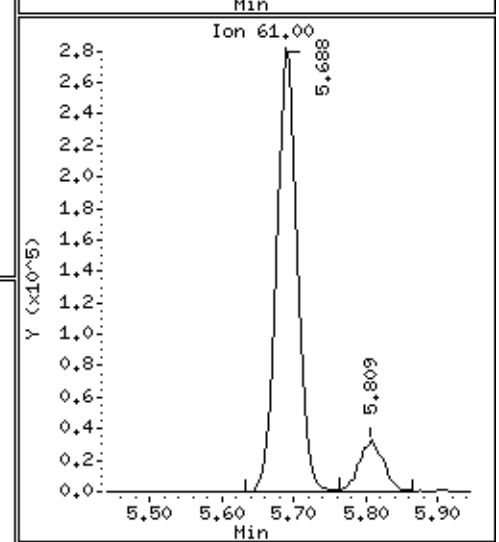


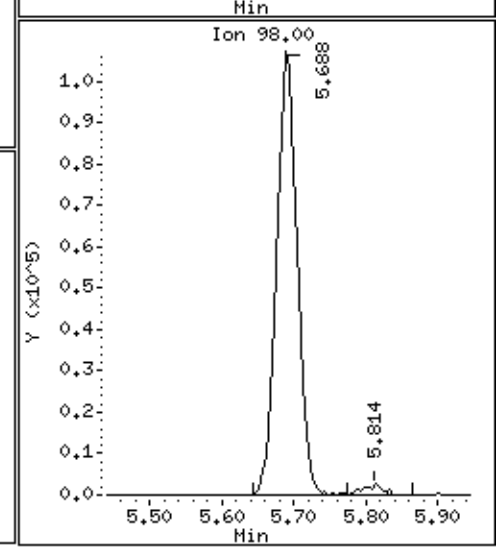












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

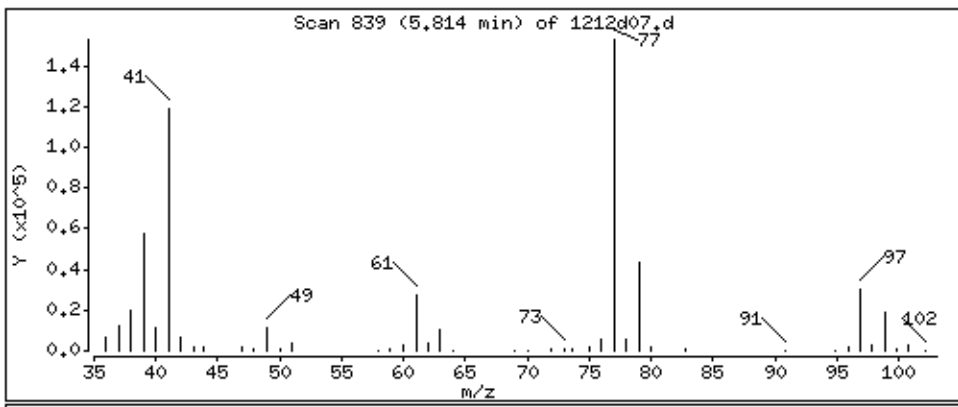
Operator: GEM

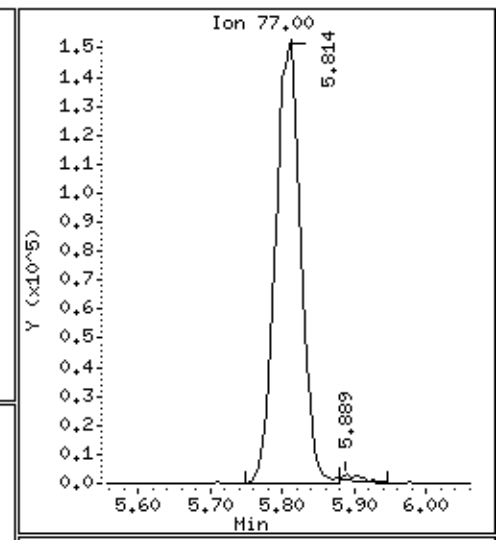
Column phase: RTX VMS 30m

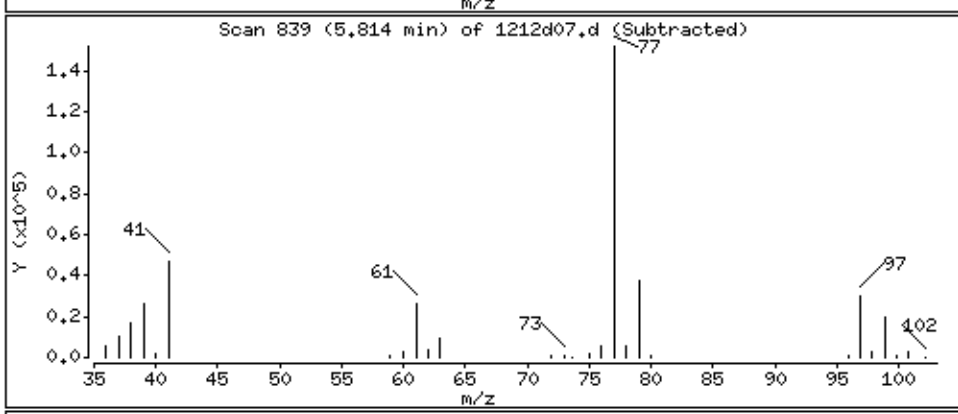
Column diameter: 0.25

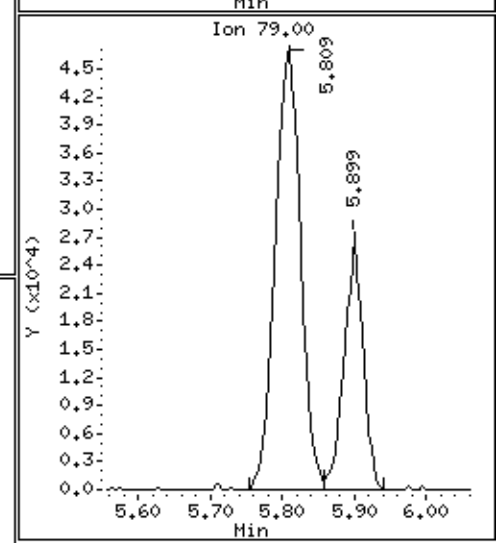
25 2,2-Dichloropropane

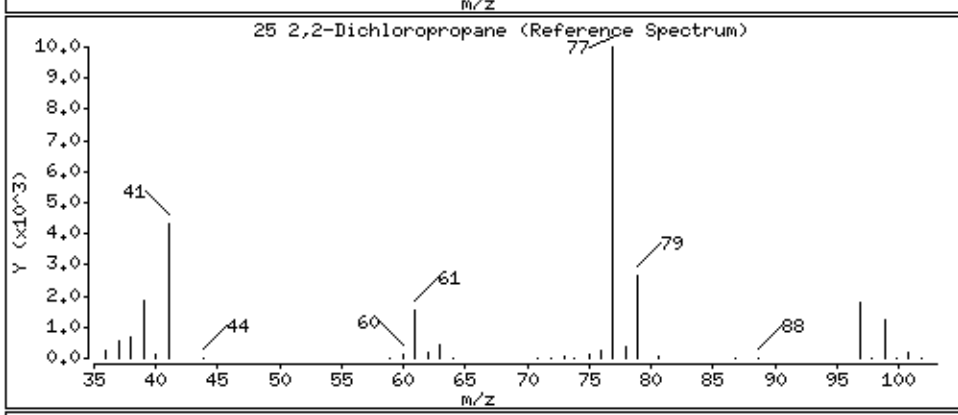
Concentration: 47.1 ug/L

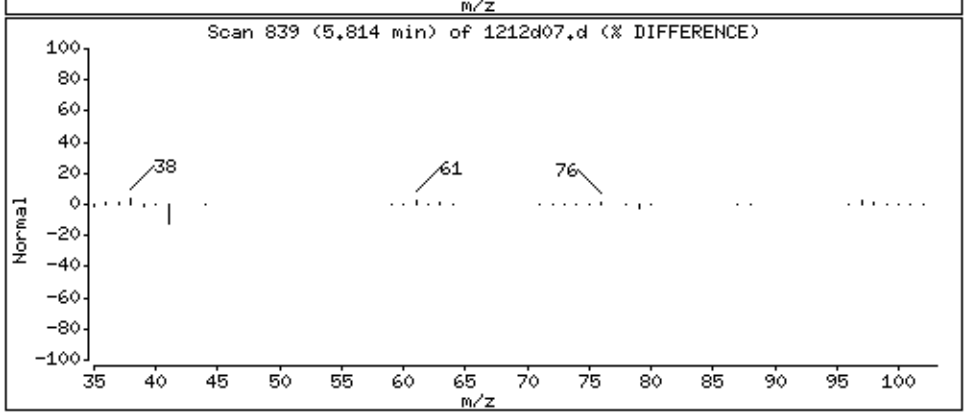












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

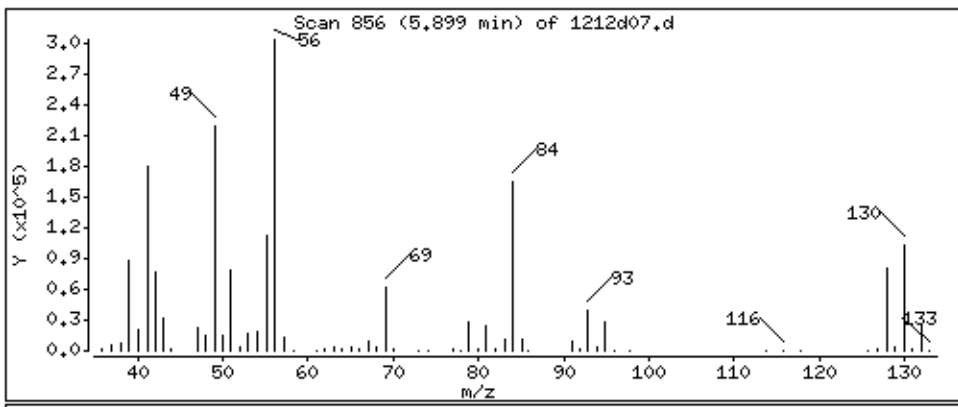
Operator: GEM

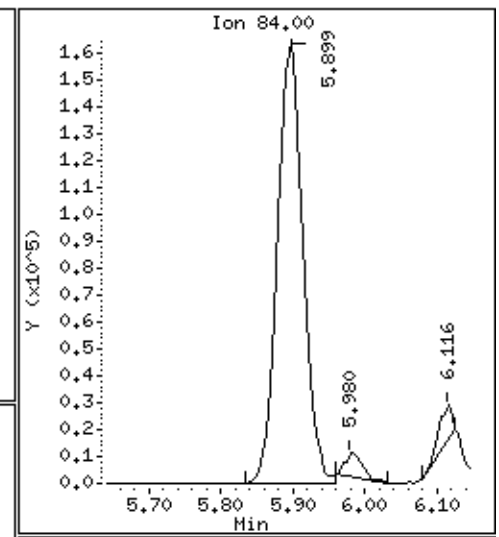
Column phase: RTX VMS 30m

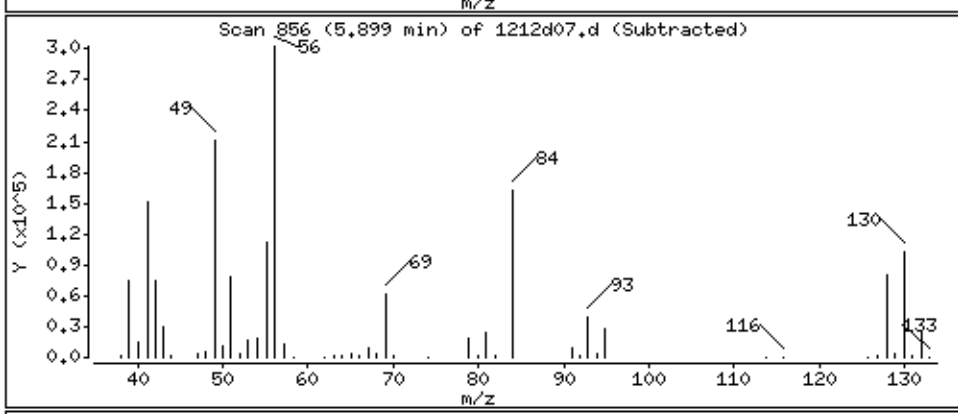
Column diameter: 0.25

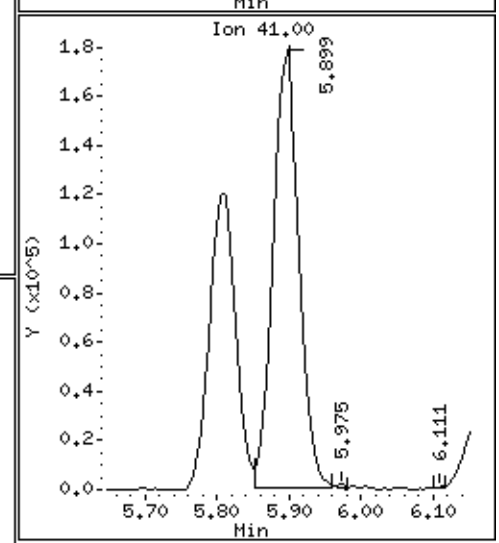
26 Cyclohexane

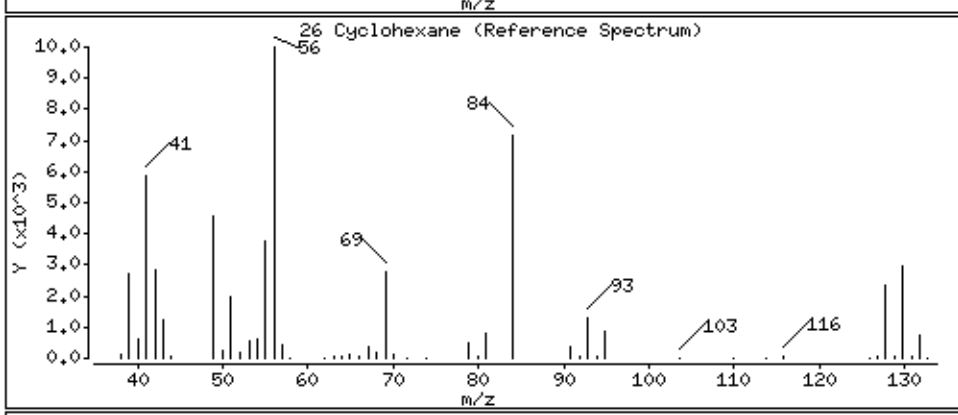
Concentration: 44.9 ug/L

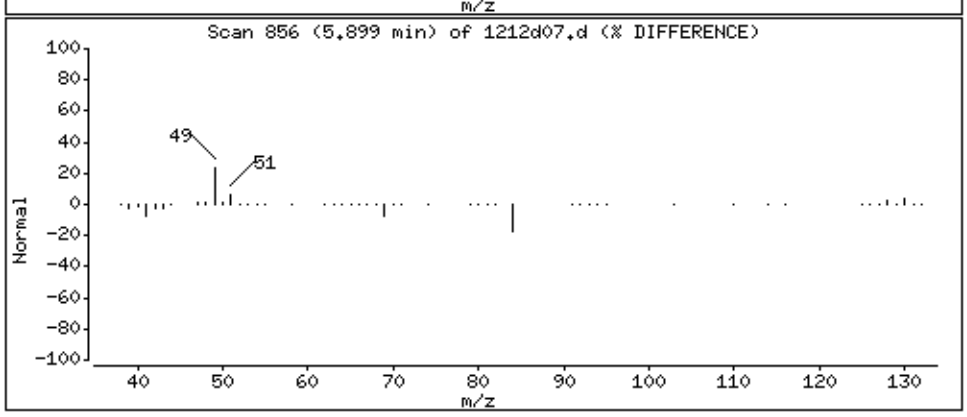












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

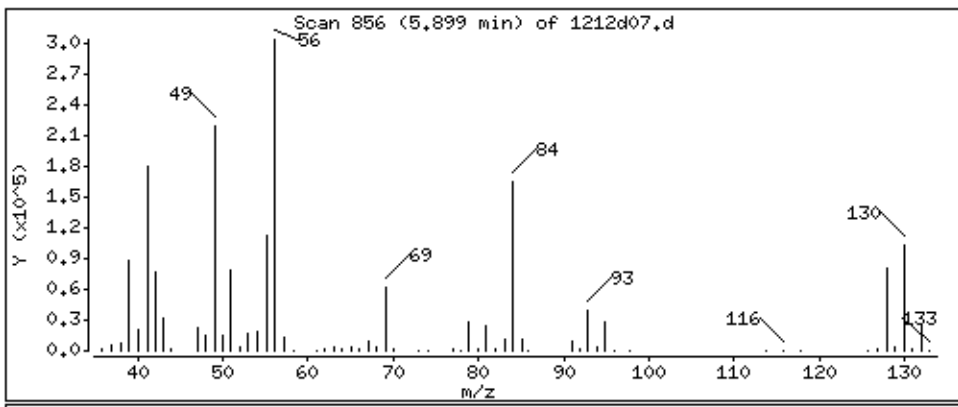
Client ID: MBLCS | Instrument: 20msvd.i

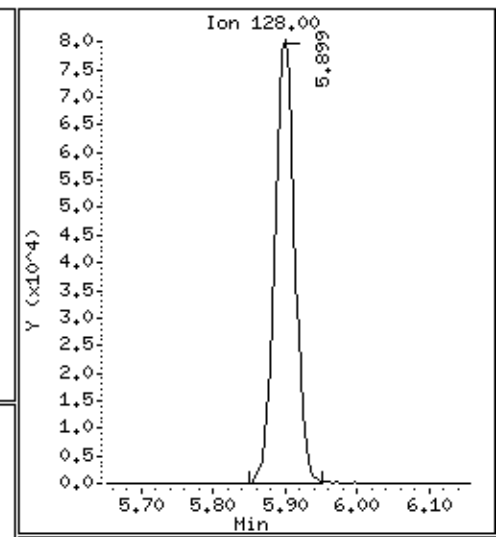
Sample Info: 415095,SPK

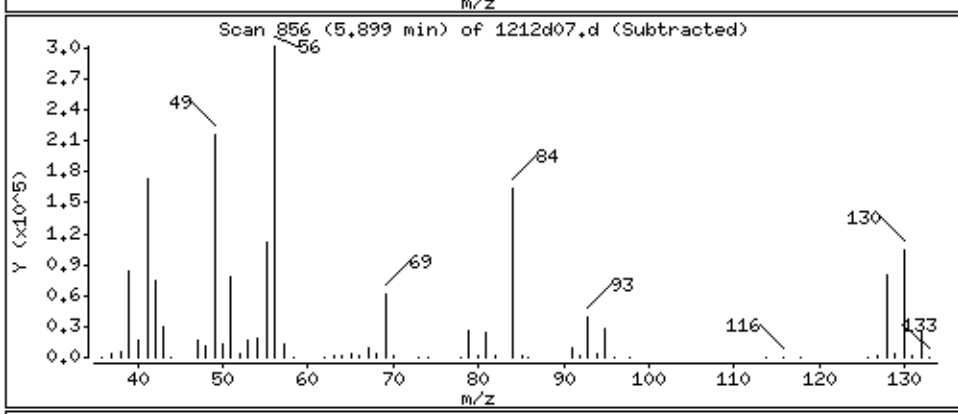
Purge Volume: 5.0 | Operator: GEM

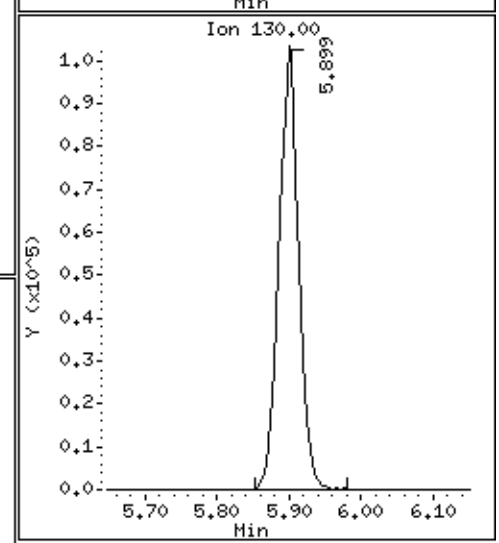
Column phase: RTX VMS 30m | Column diameter: 0.25

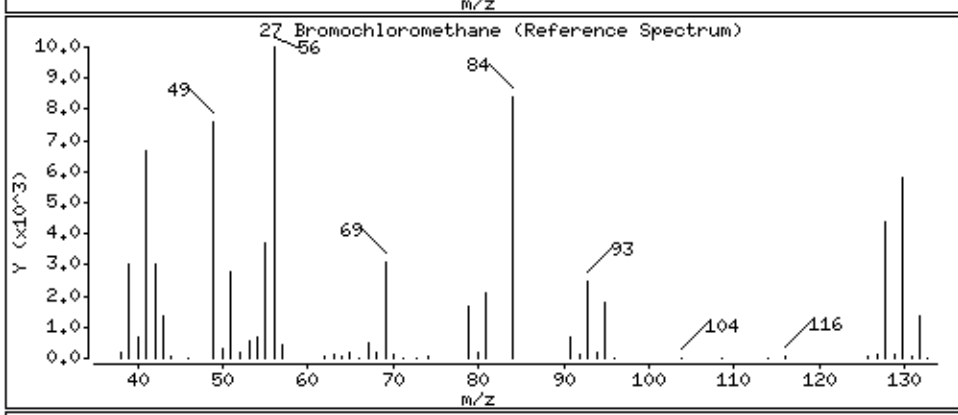
27 Bromochloromethane | Concentration: 44.0 ug/L

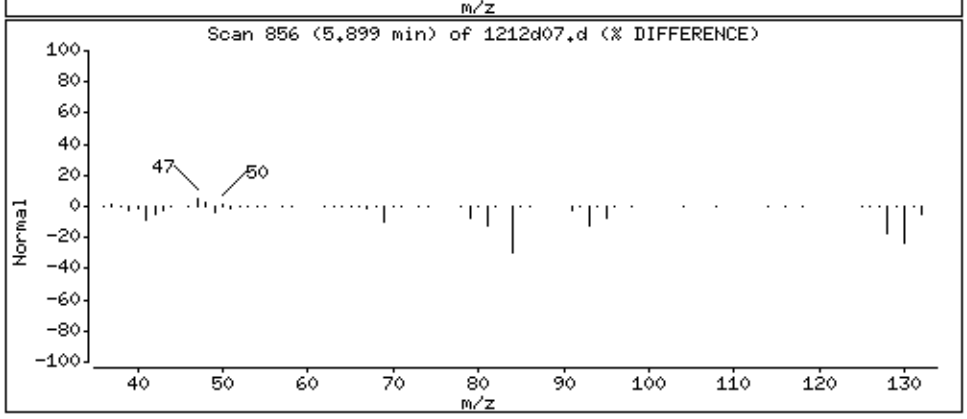












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

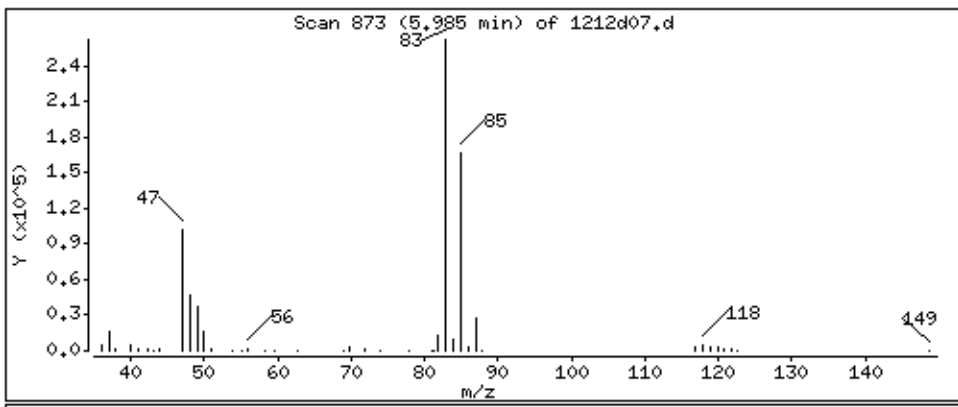
Operator: GEM

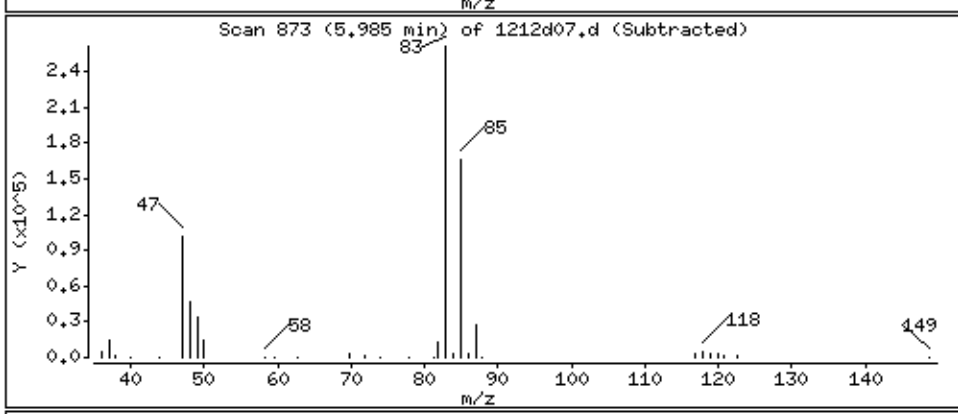
Column phase: RTX VMS 30m

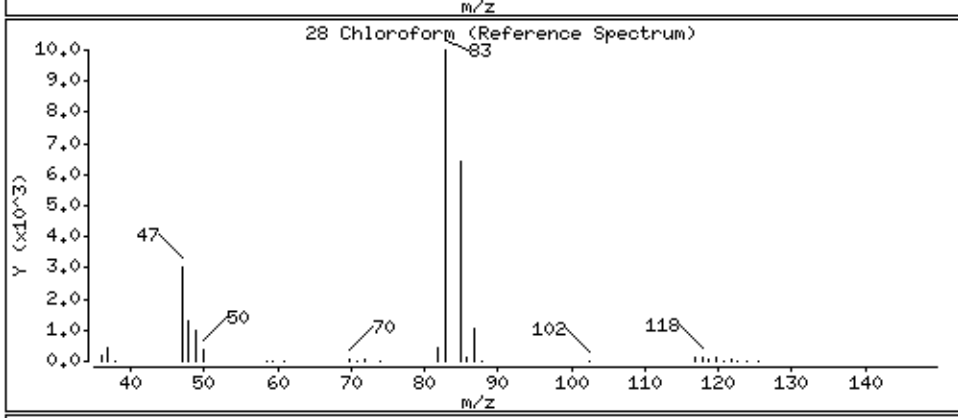
Column diameter: 0.25

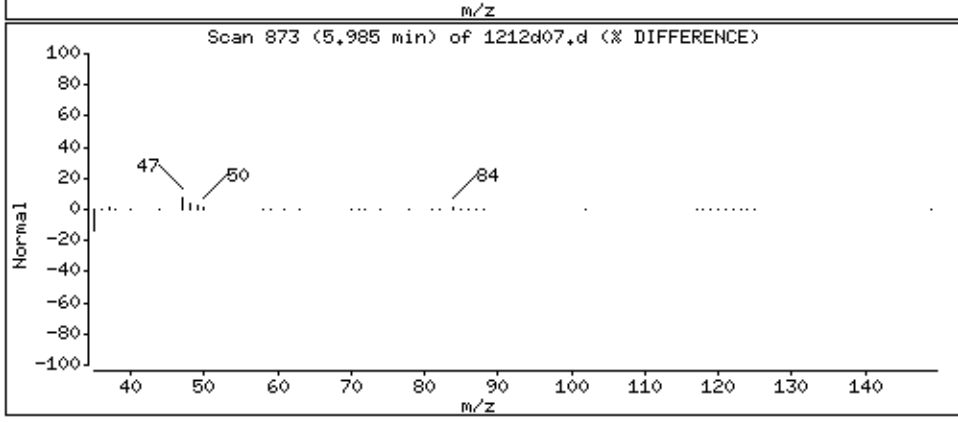
28 Chloroform

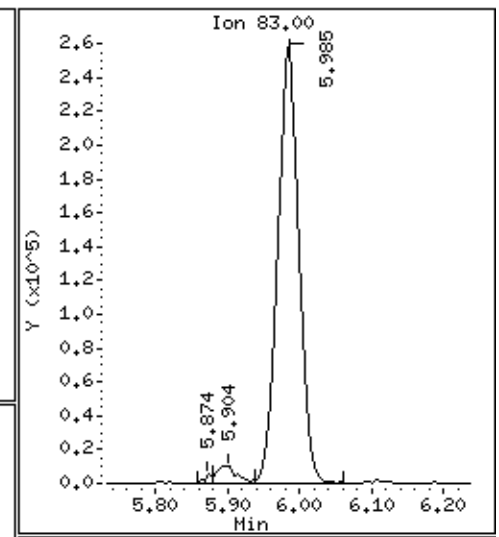
Concentration: 46.8 ug/L

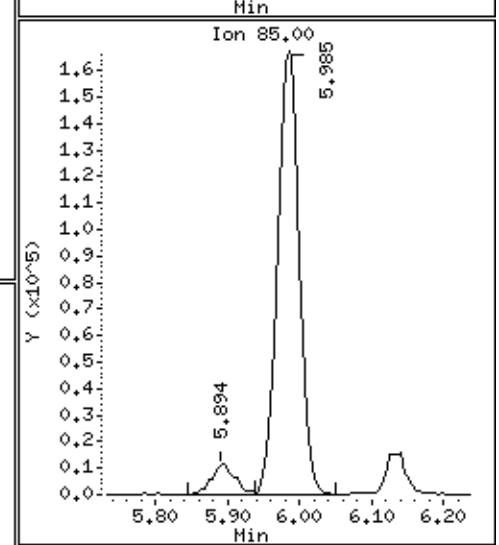


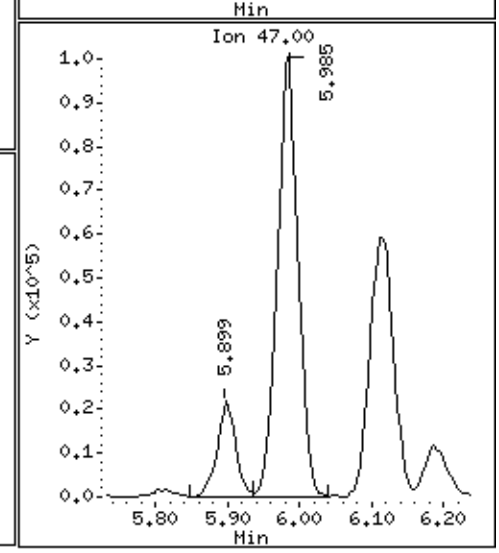












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

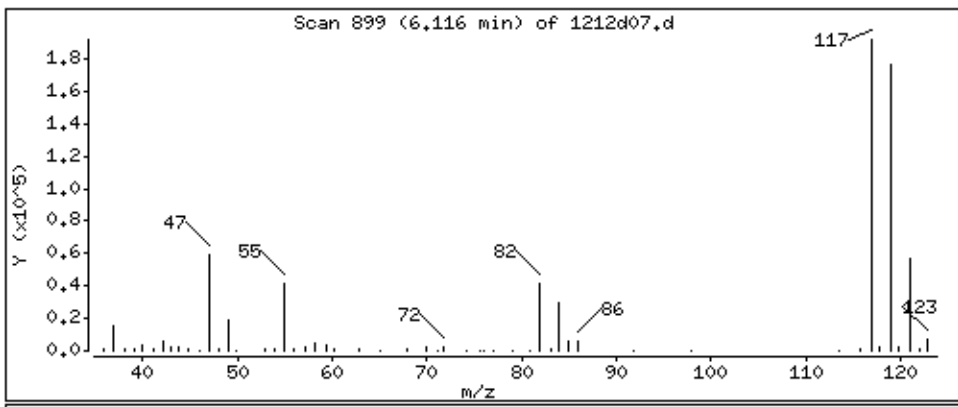
Operator: GEM

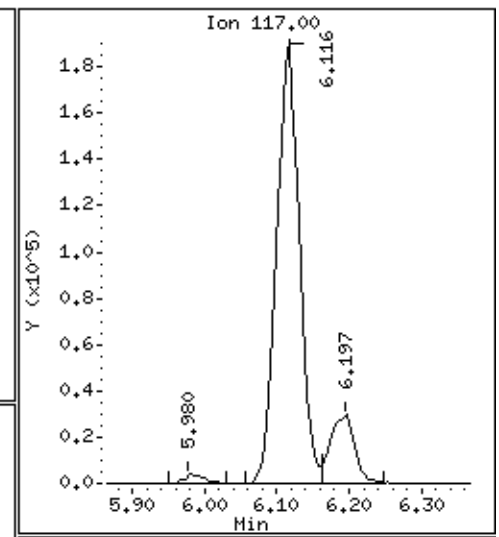
Column phase: RTX VMS 30m

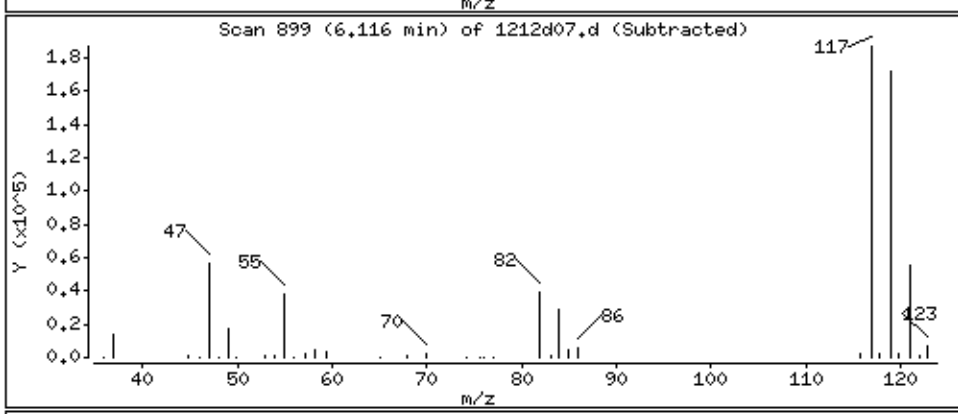
Column diameter: 0.25

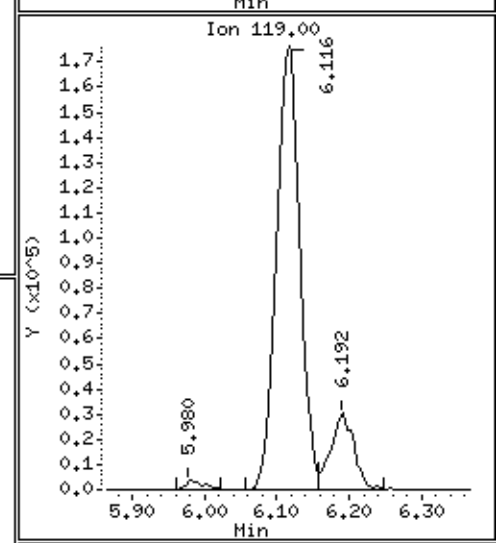
29 Carbon tetrachloride

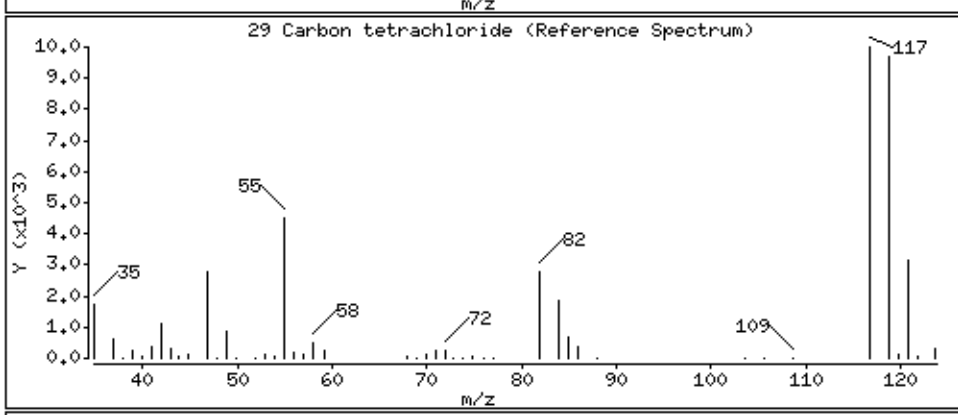
Concentration: 48.4 ug/L

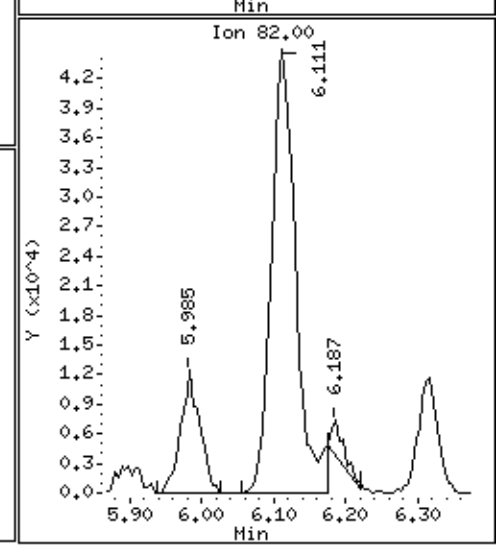


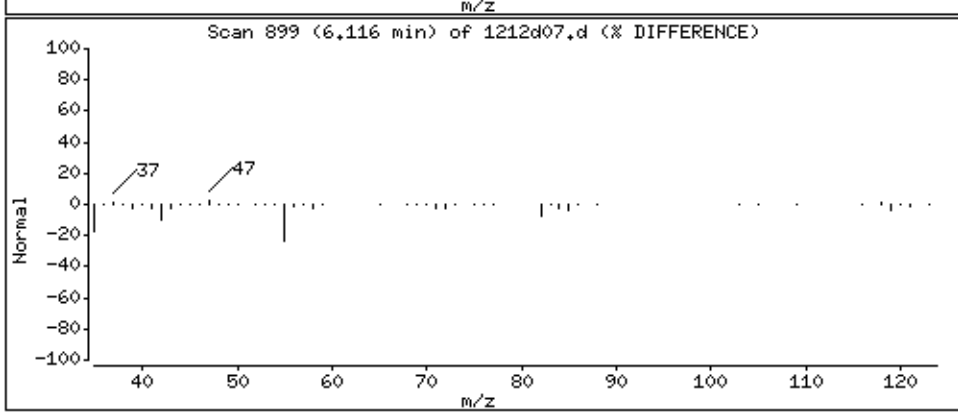












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

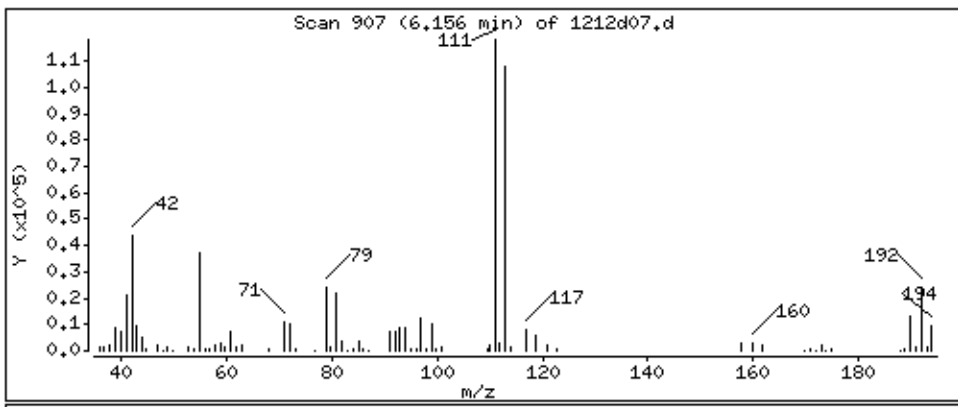
Operator: GEM

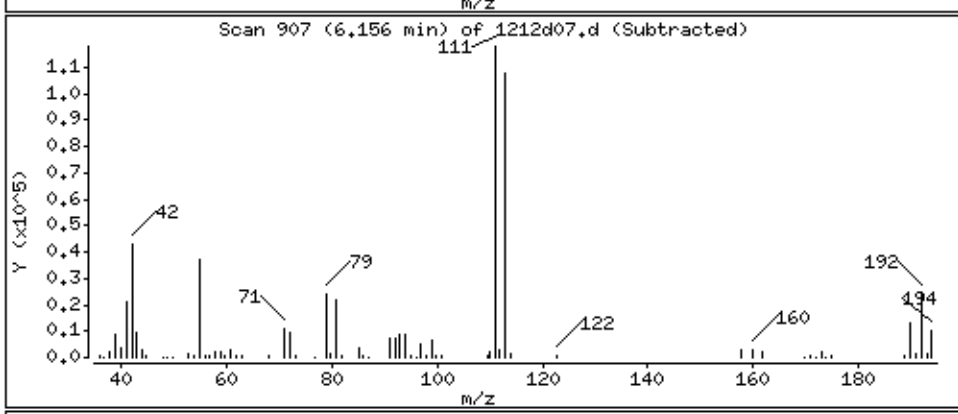
Column phase: RTX VMS 30m

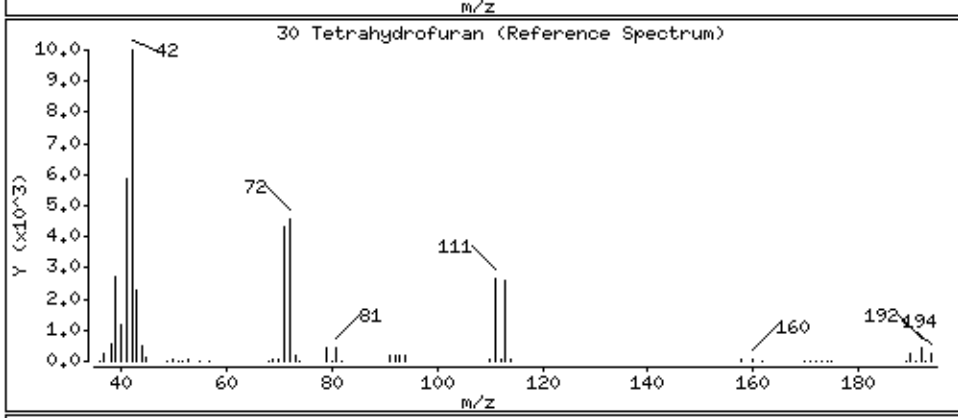
Column diameter: 0.25

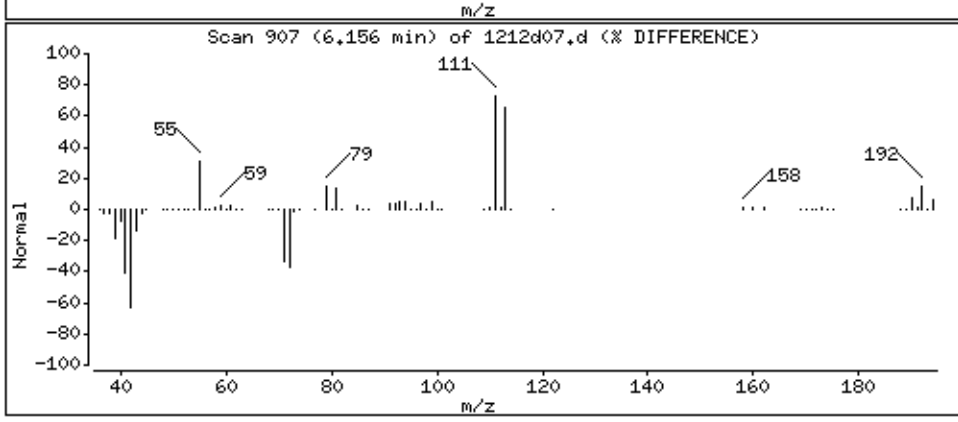
30 Tetrahydrofuran

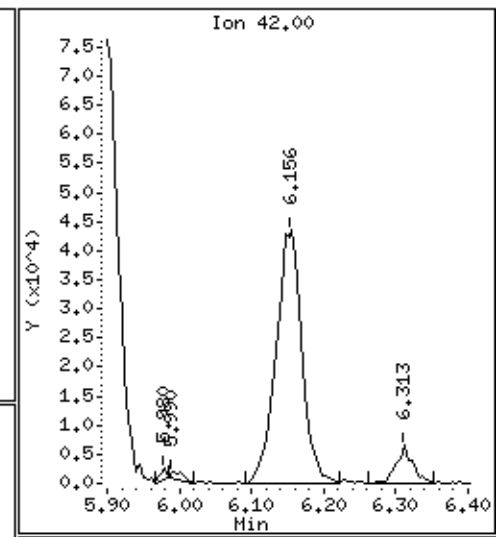
Concentration: 43.1 ug/L

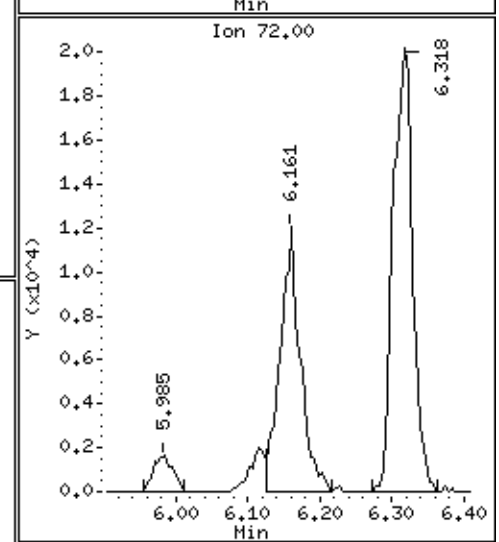


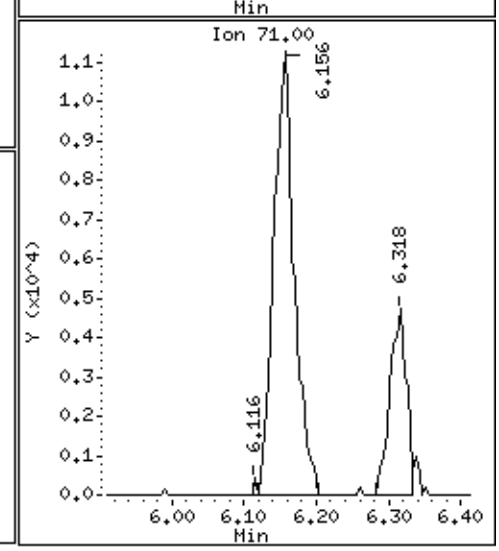












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

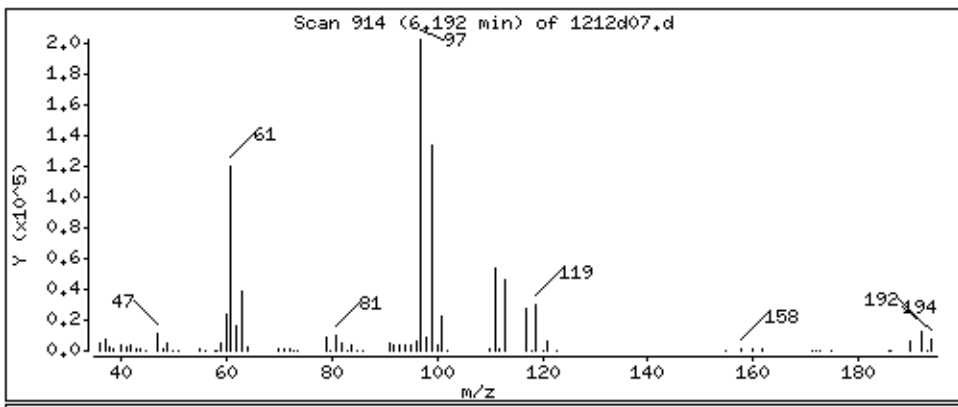
Client ID: MBLCS | Instrument: 20msvd.i

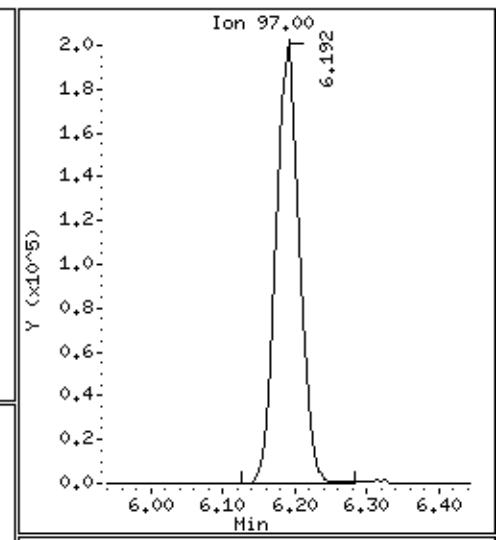
Sample Info: 415095,SPK

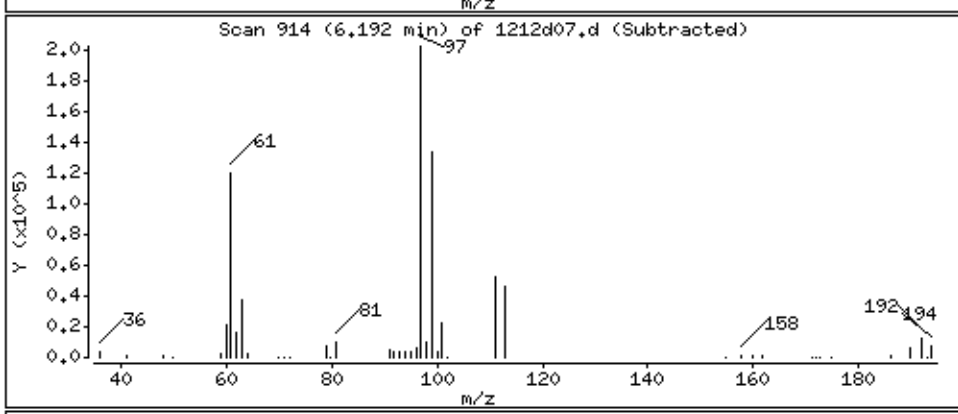
Purge Volume: 5.0 | Operator: GEM

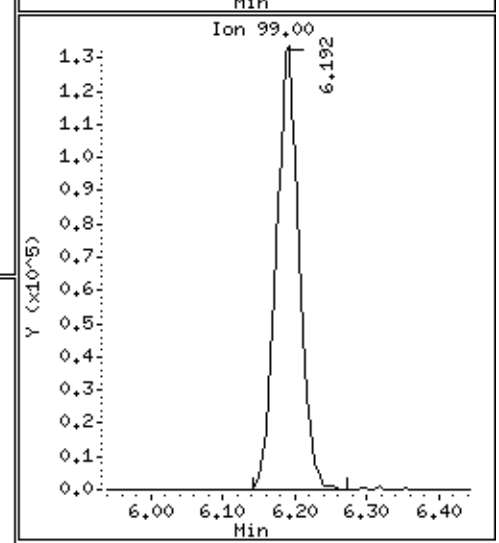
Column phase: RTX VMS 30m | Column diameter: 0.25

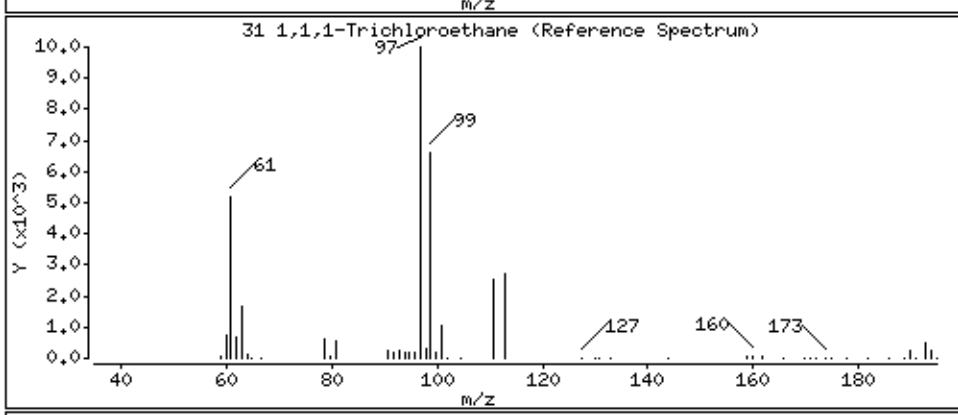
31 1,1,1-Trichloroethane | Concentration: 45.5 ug/L

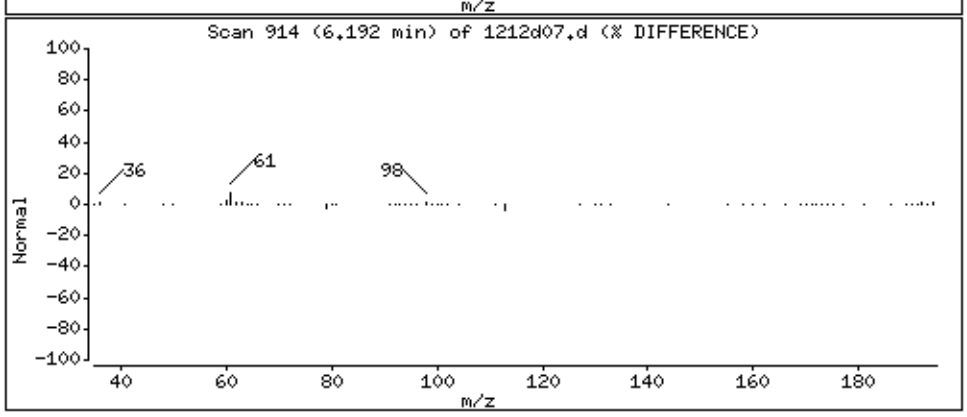












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

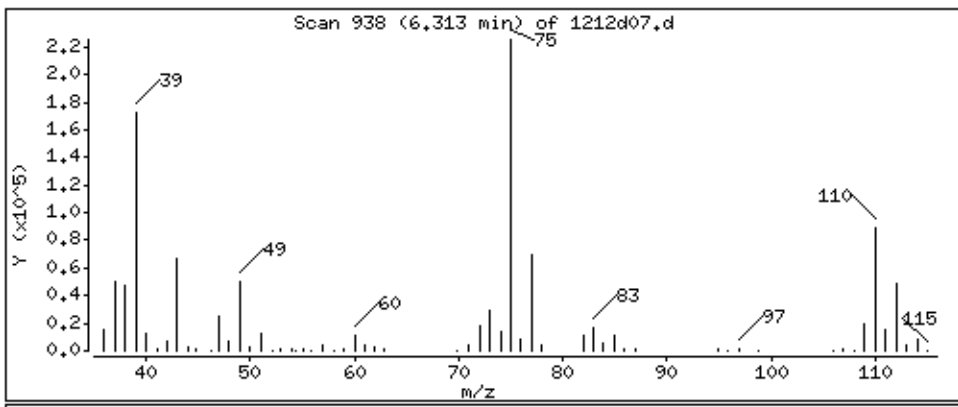
Client ID: MBLCS | Instrument: 20msvd.i

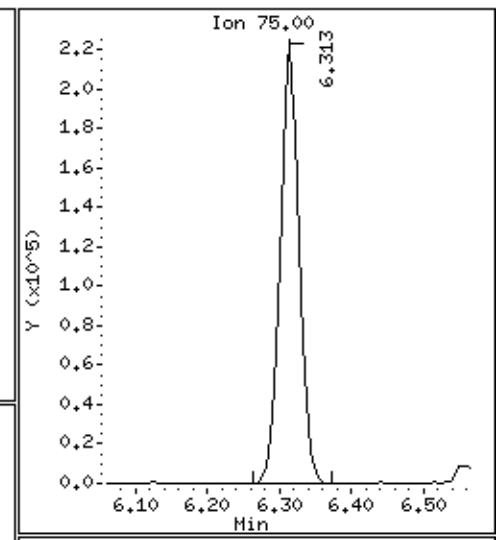
Sample Info: 415095,SPK

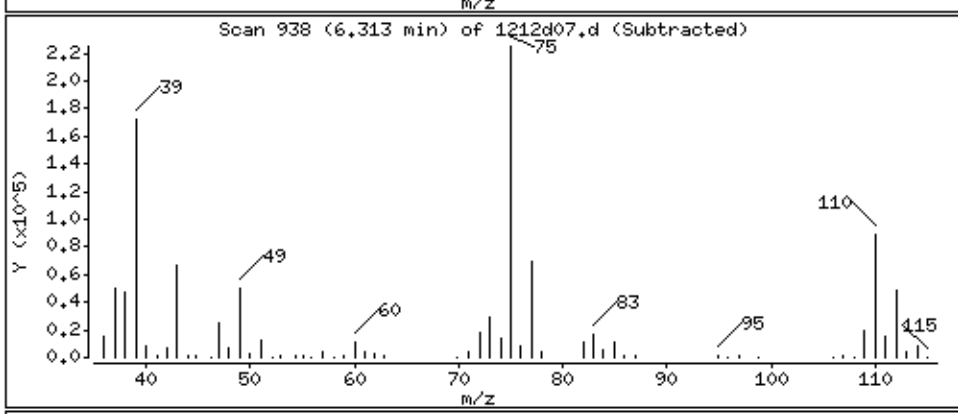
Purge Volume: 5.0 | Operator: GEM

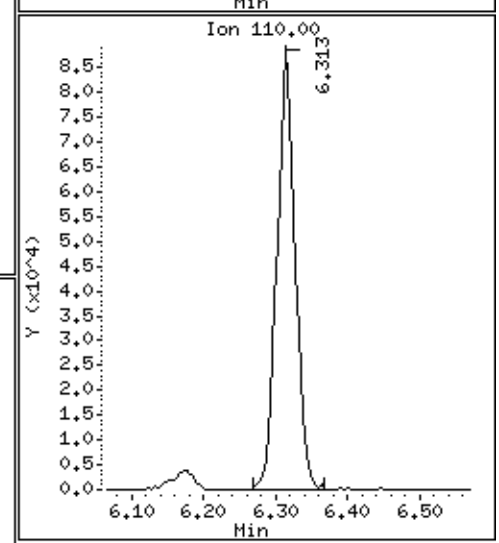
Column phase: RTX VMS 30m | Column diameter: 0.25

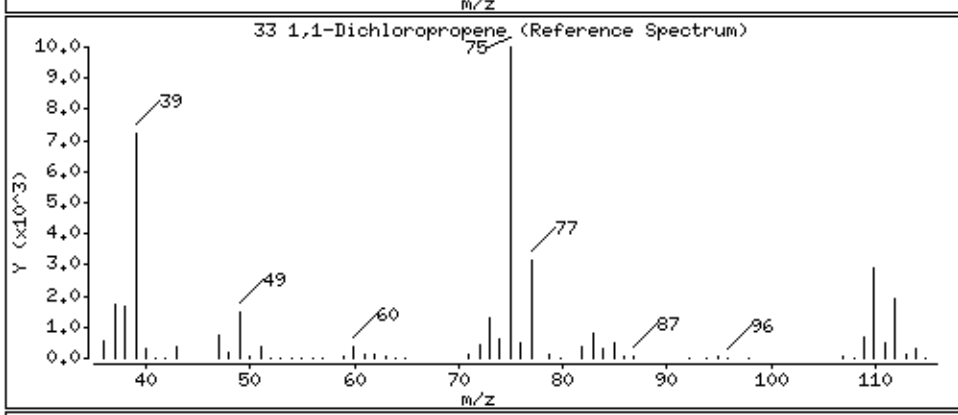
33 1,1-Dichloropropene | Concentration: 46.3 ug/L

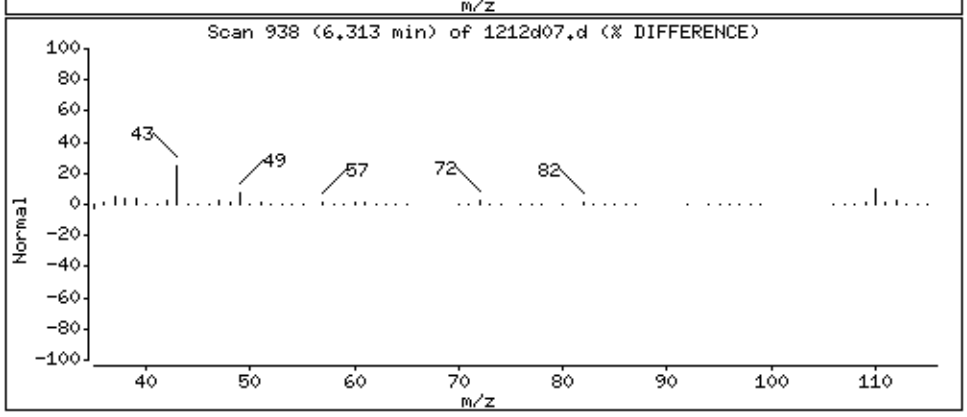












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

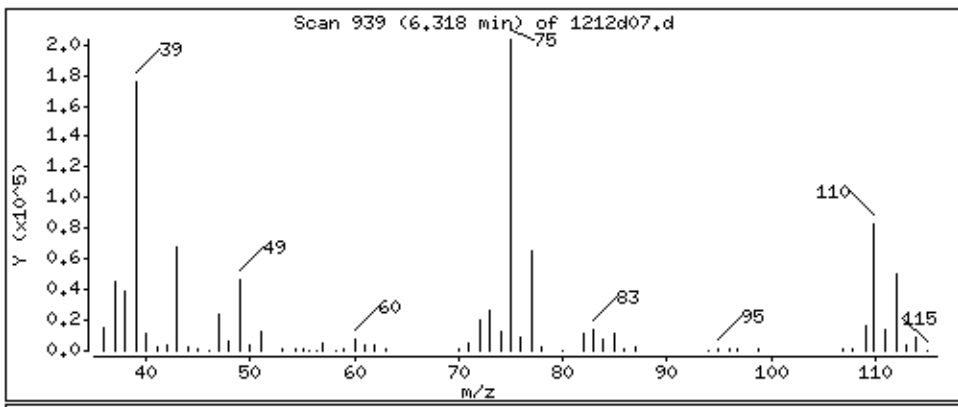
Client ID: MBLCS | Instrument: 20msvd.i

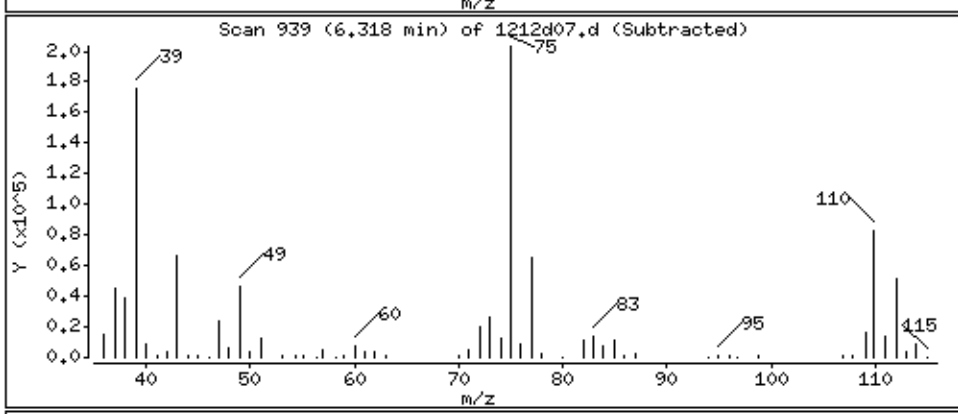
Sample Info: 415095,SPK

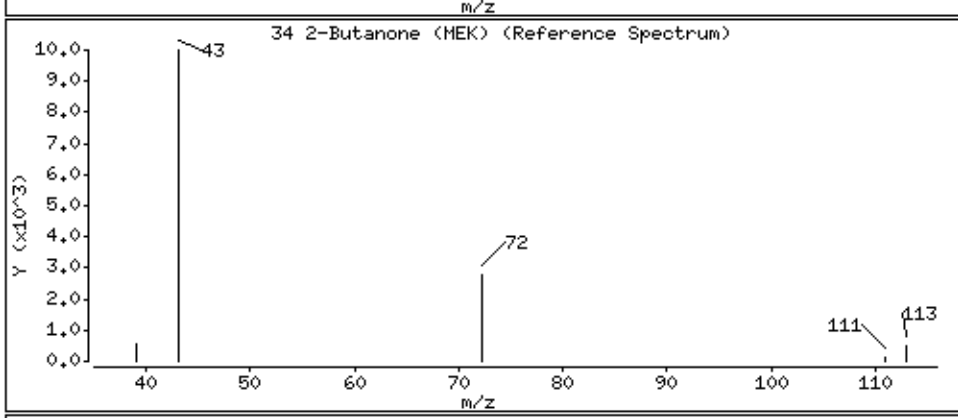
Purge Volume: 5.0 | Operator: GEM

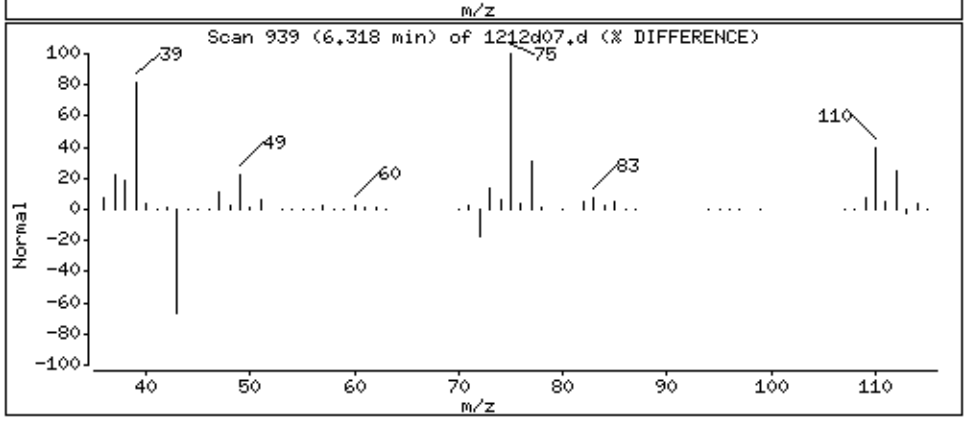
Column phase: RTX VMS 30m | Column diameter: 0.25

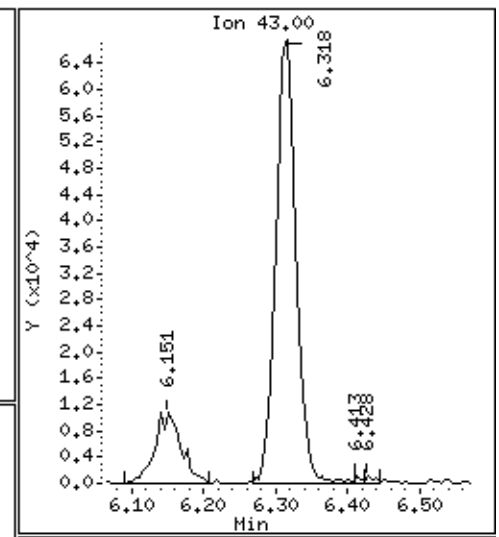
34 2-Butanone (MEK) | Concentration: 43.5 ug/L

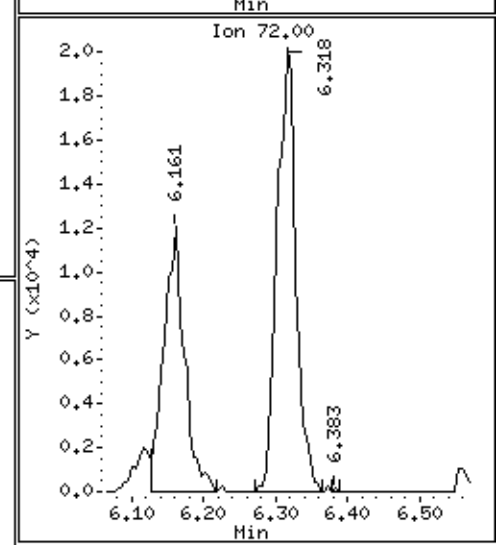












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

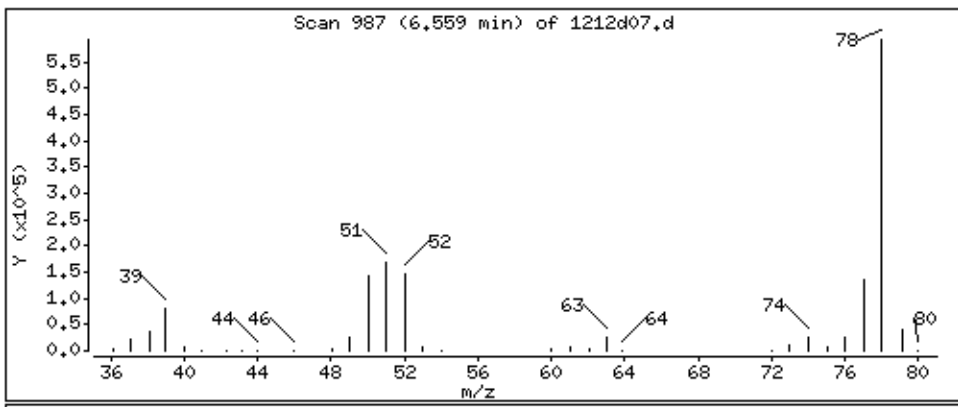
Operator: GEM

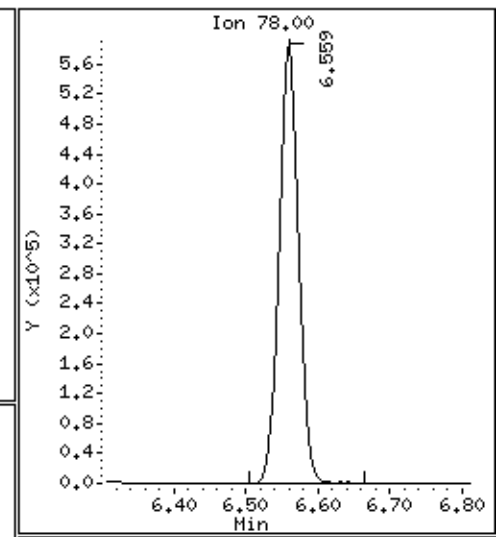
Column phase: RTX VMS 30m

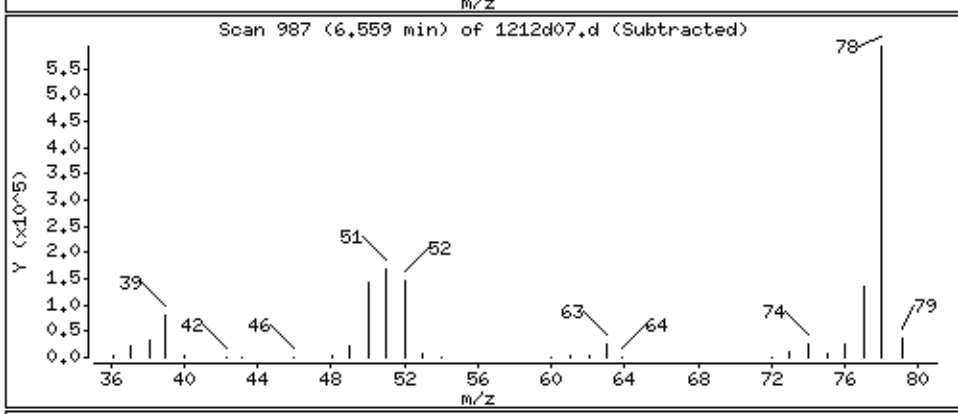
Column diameter: 0.25

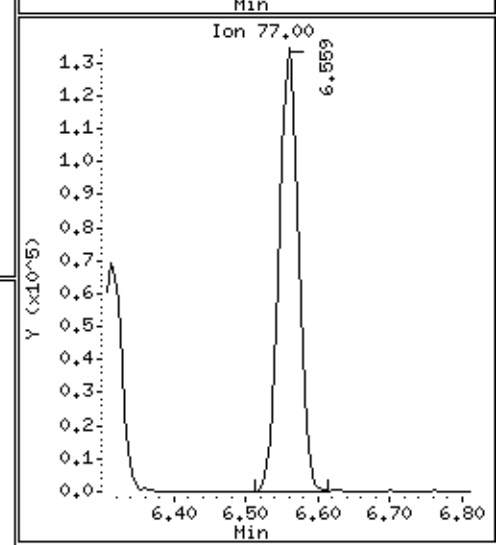
35 Benzene

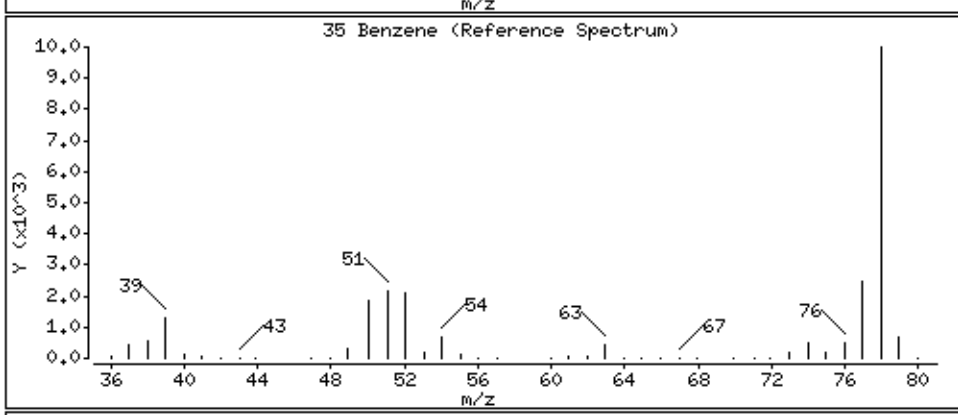
Concentration: 44.9 ug/L

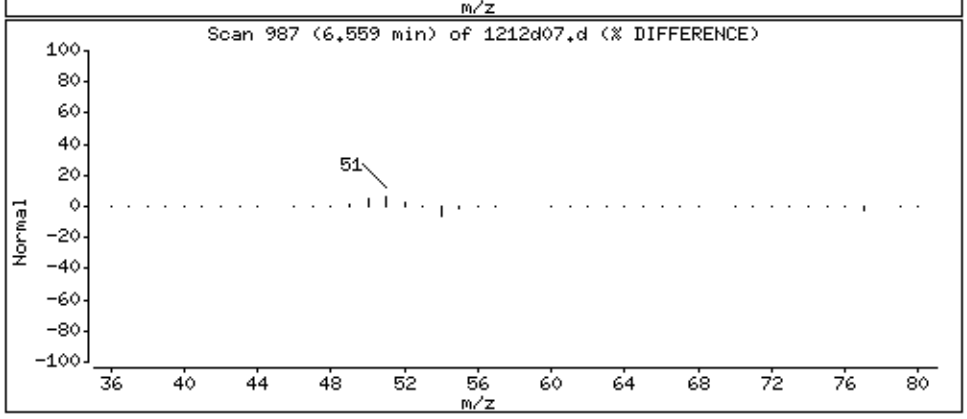












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

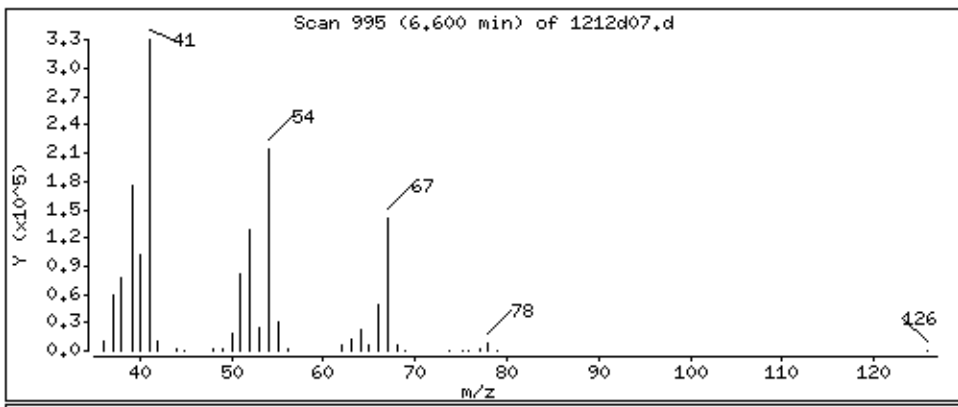
Operator: GEM

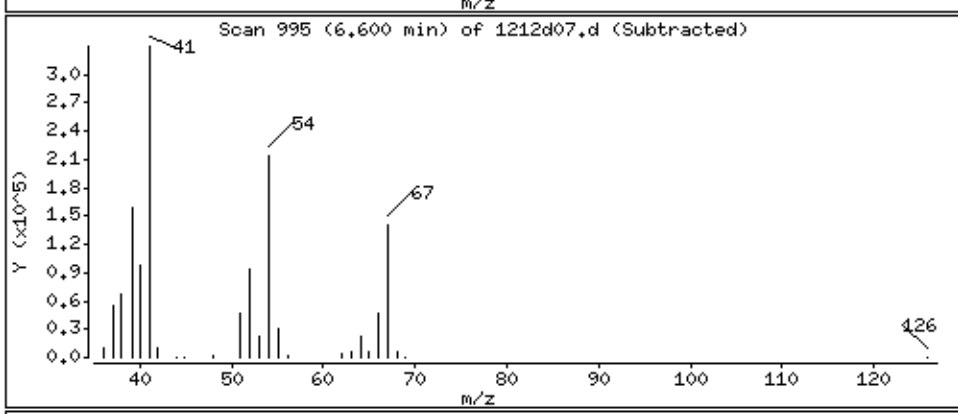
Column phase: RTX VMS 30m

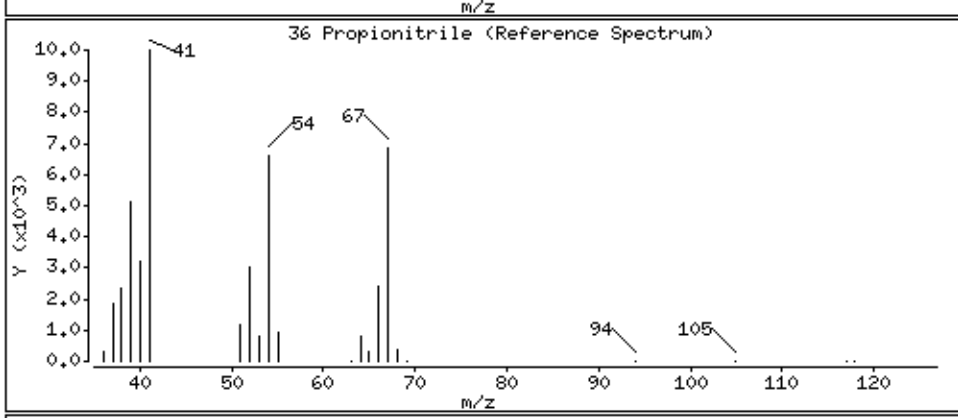
Column diameter: 0.25

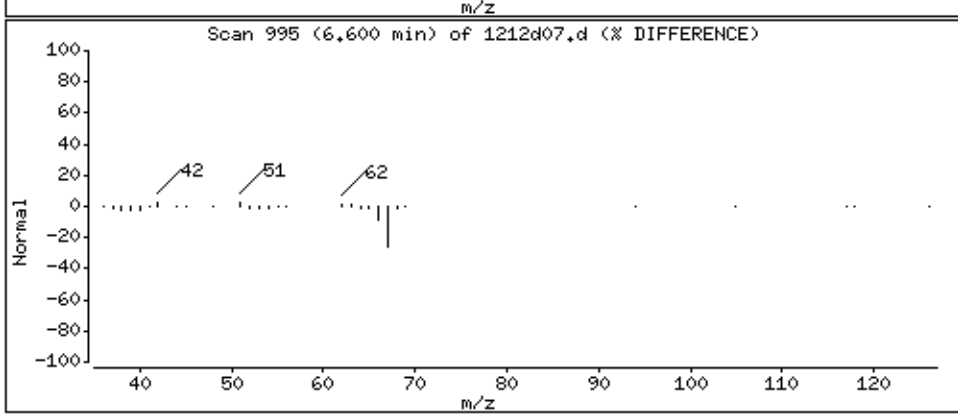
36 Propionitrile

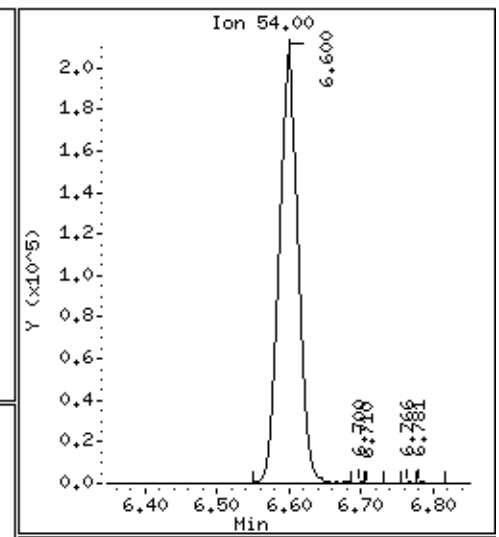
Concentration: 422 ug/L

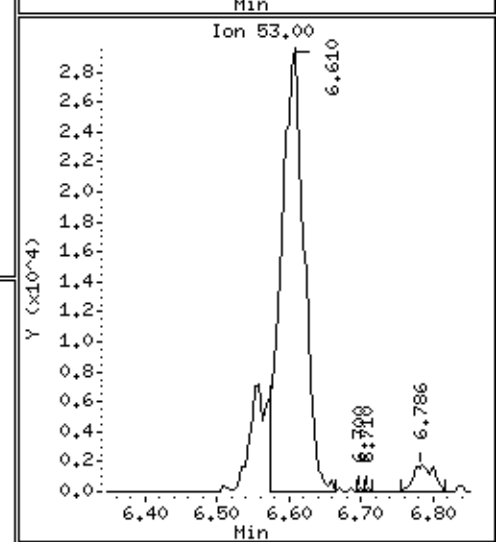


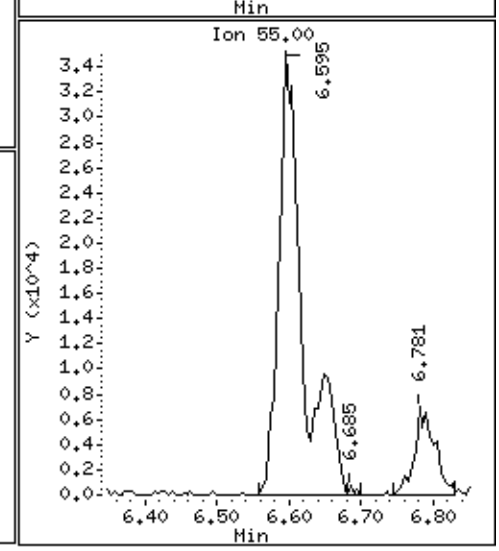












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

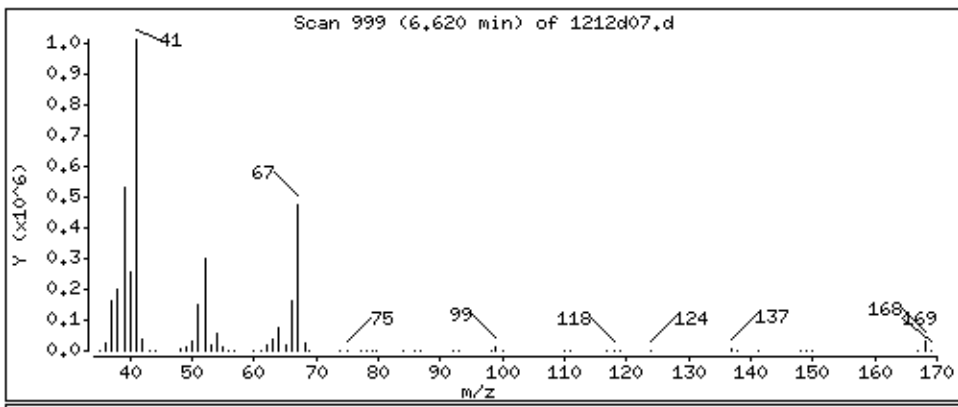
Operator: GEM

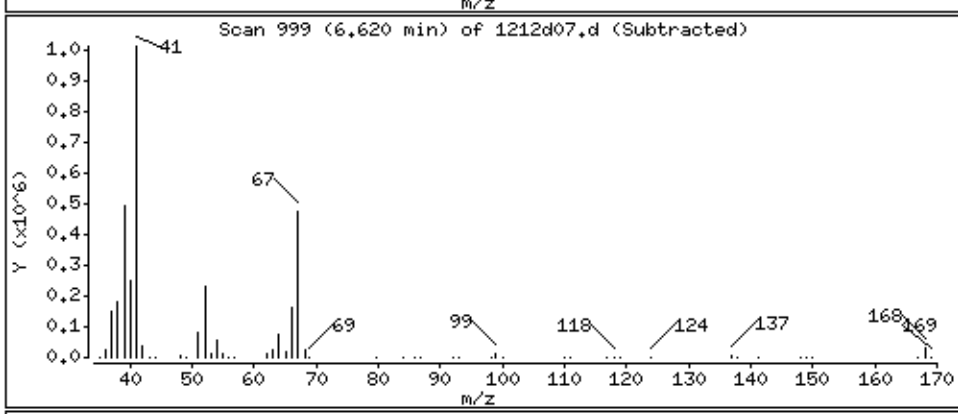
Column phase: RTX VMS 30m

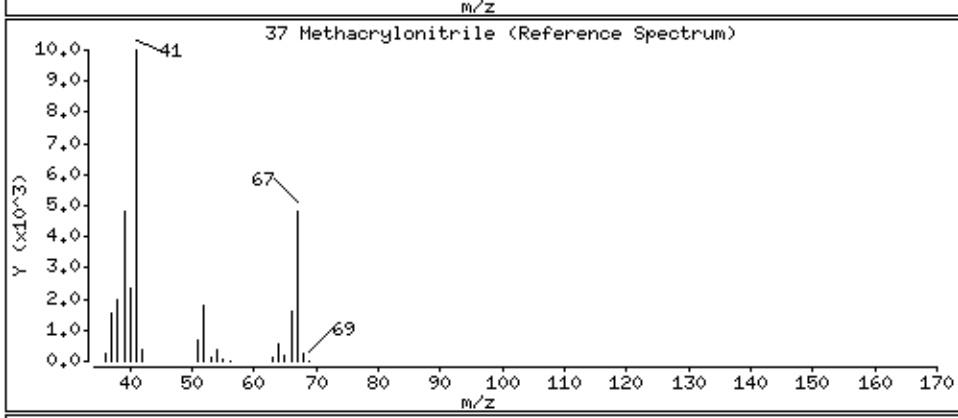
Column diameter: 0.25

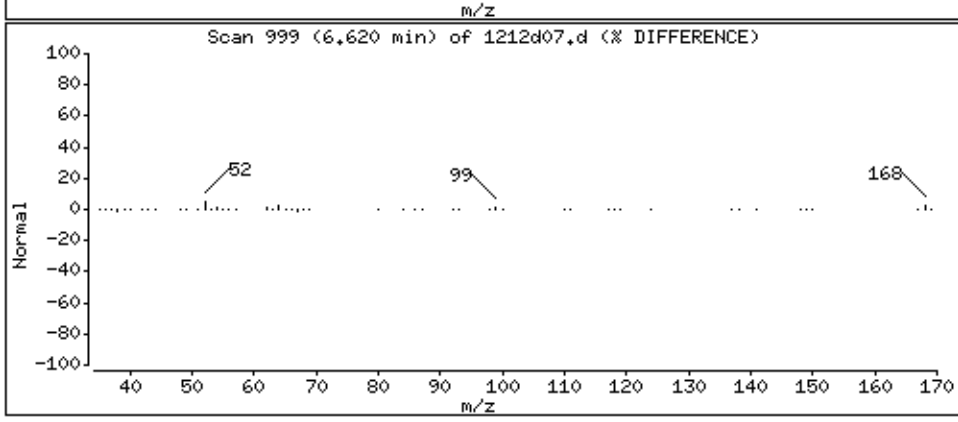
37 Methacrylonitrile

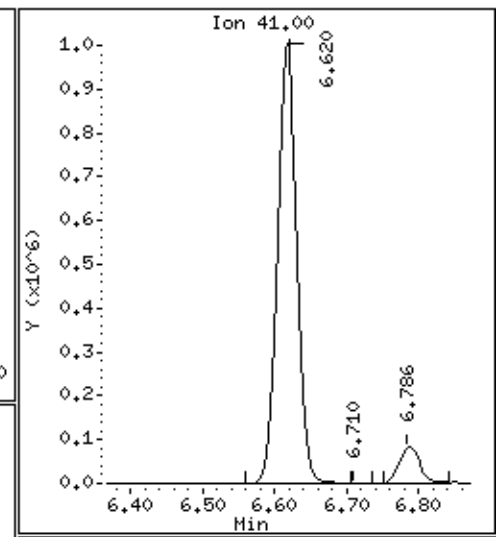
Concentration: 436 ug/L

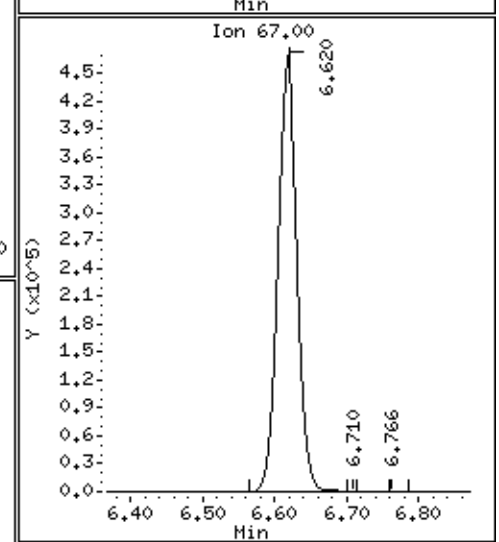


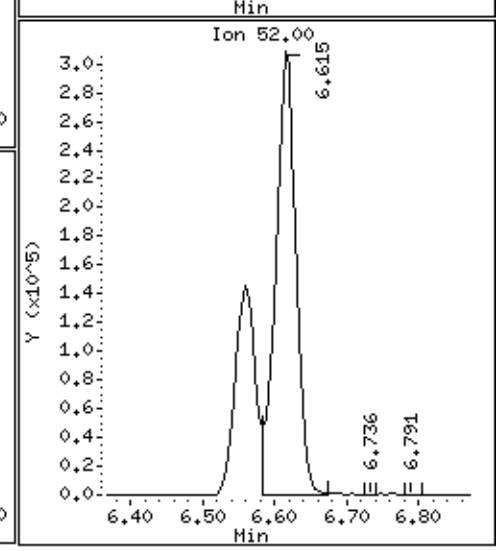












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

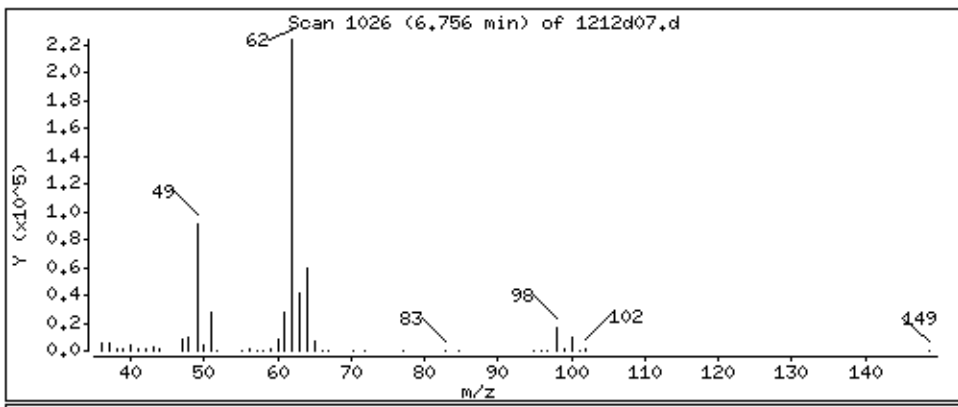
Client ID: MBLCS | Instrument: 20msvd.i

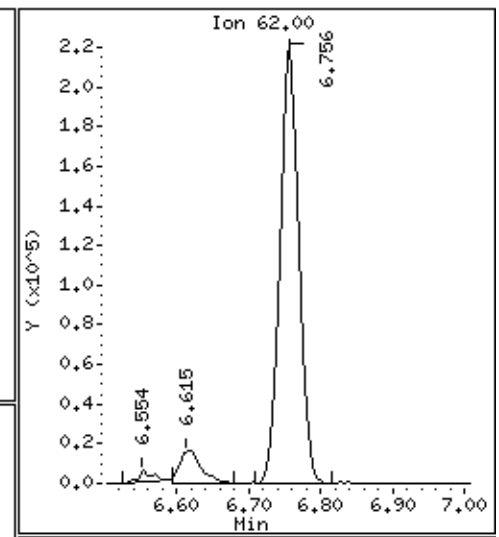
Sample Info: 415095,SPK

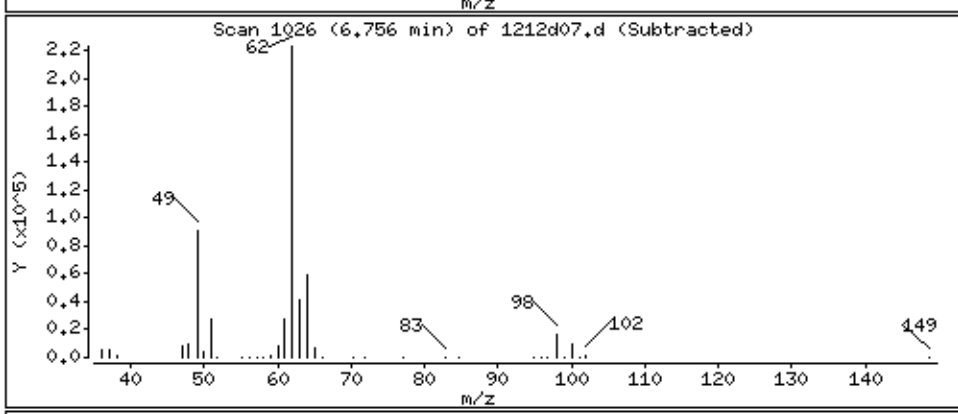
Purge Volume: 5.0 | Operator: GEM

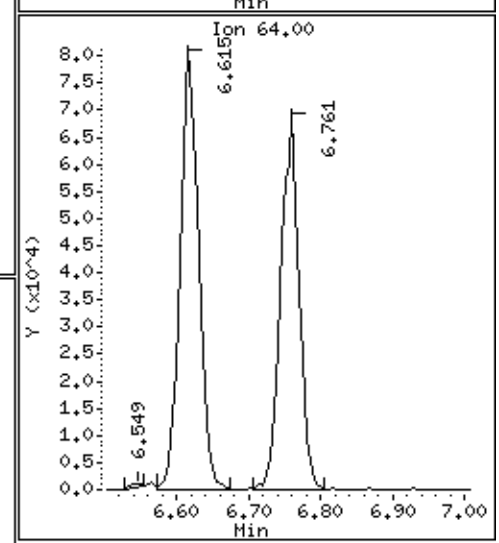
Column phase: RTX VMS 30m | Column diameter: 0.25

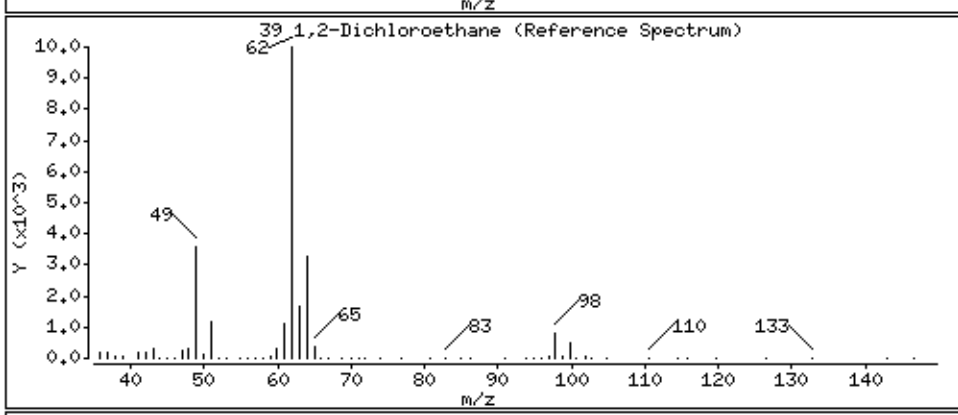
39 1,2-Dichloroethane | Concentration: 44.3 ug/L

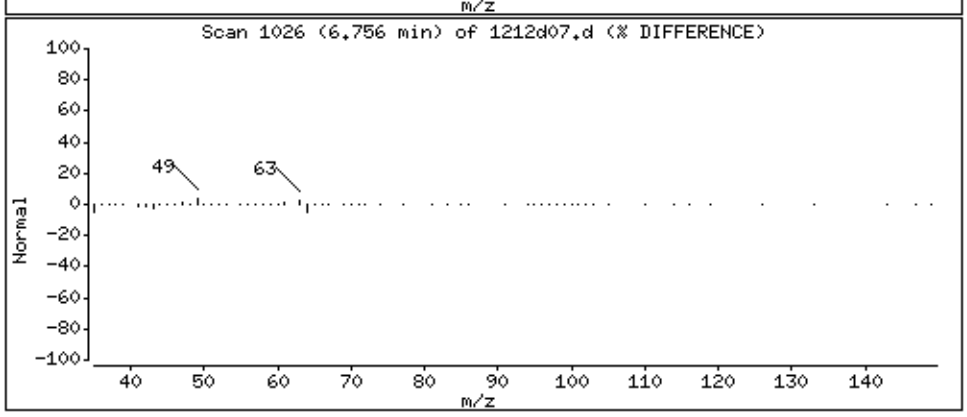












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

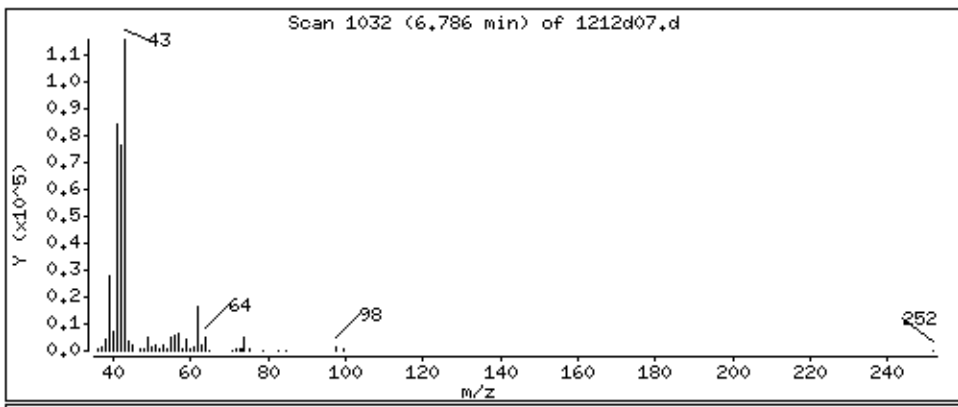
Operator: GEM

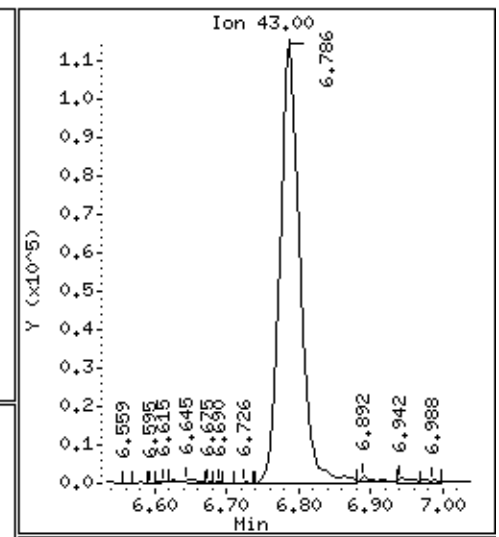
Column phase: RTX VMS 30m

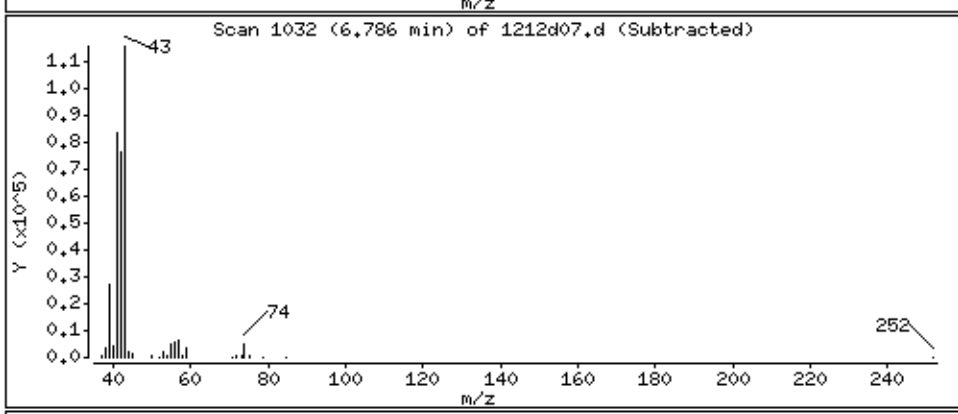
Column diameter: 0.25

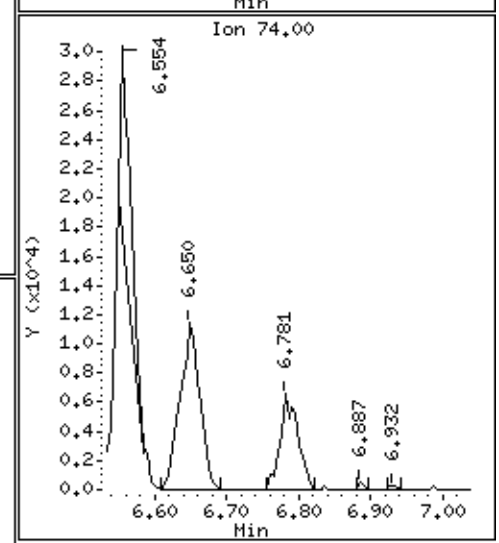
40 Isobutanol

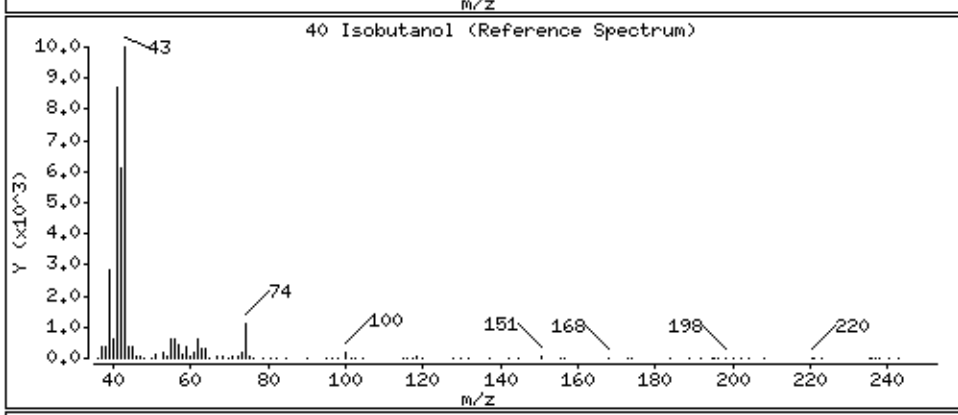
Concentration: 876 ug/L

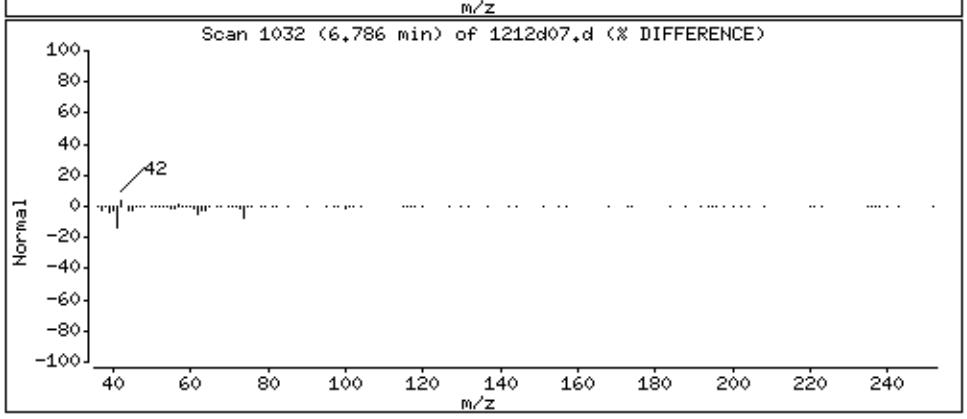












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

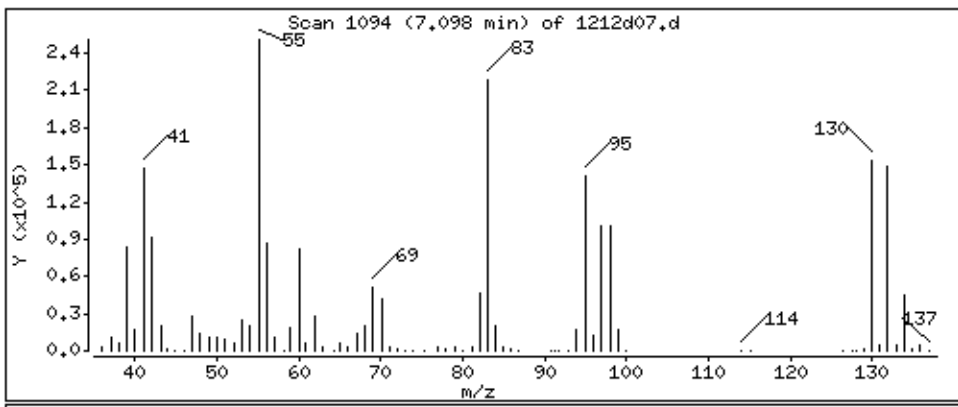
Operator: GEM

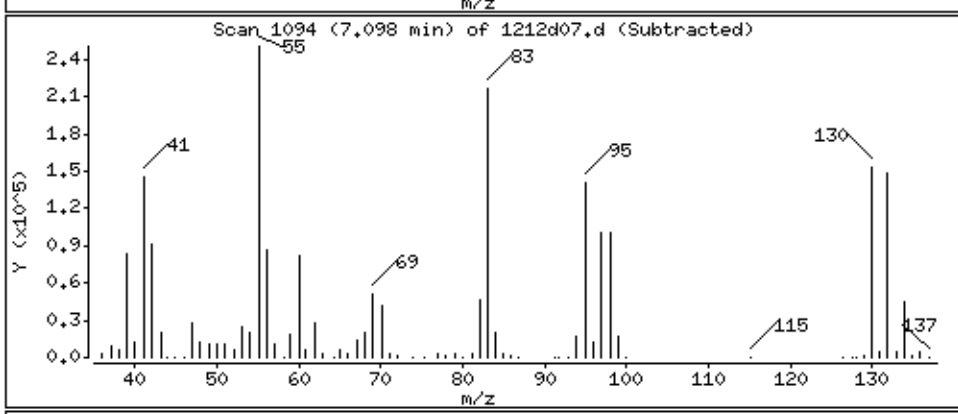
Column phase: RTX VMS 30m

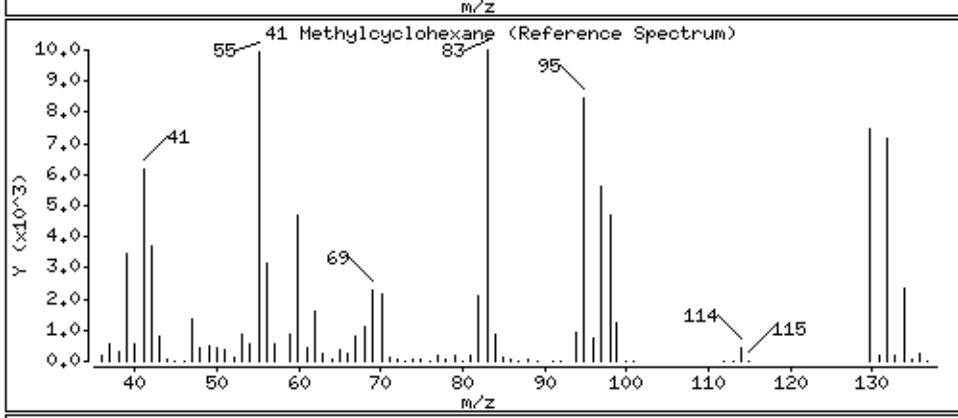
Column diameter: 0.25

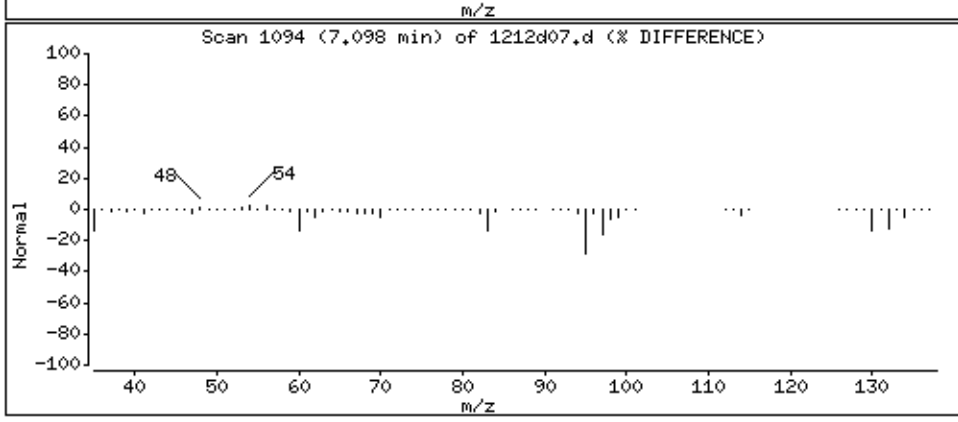
41 Methylcyclohexane

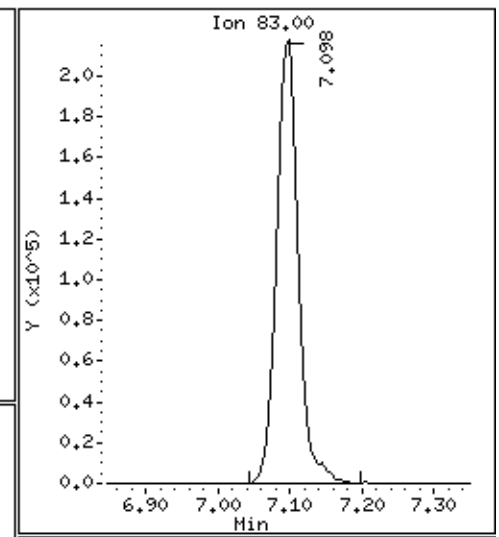
Concentration: 49.1 ug/L

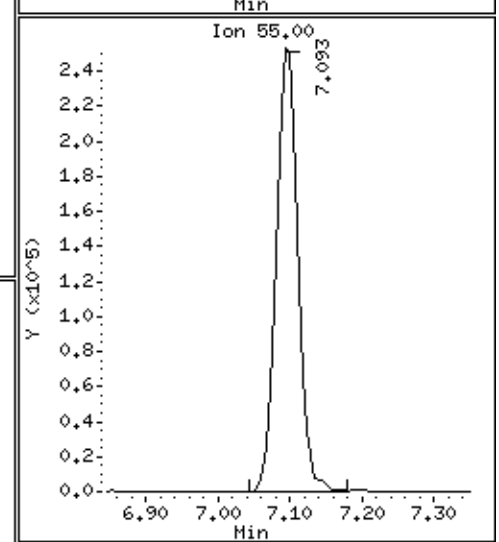


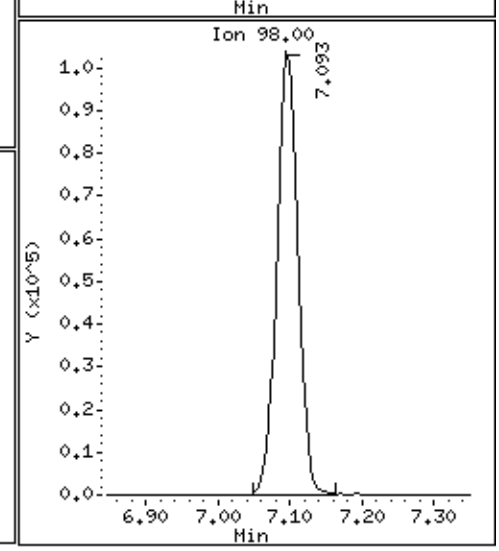












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

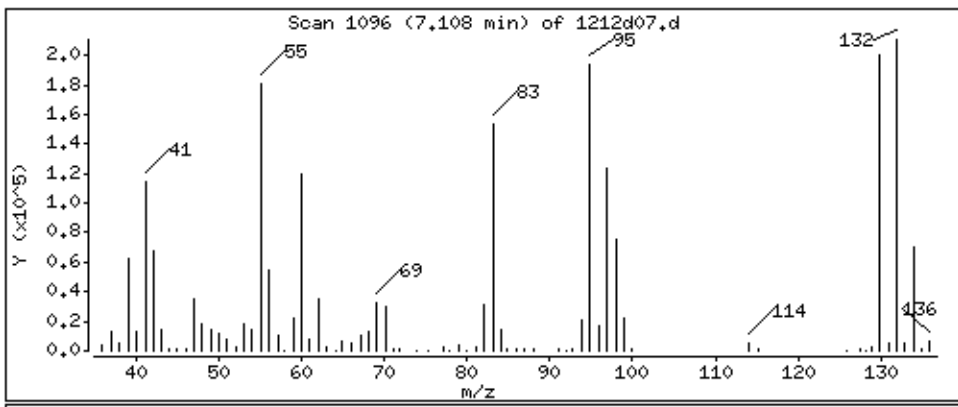
Operator: GEM

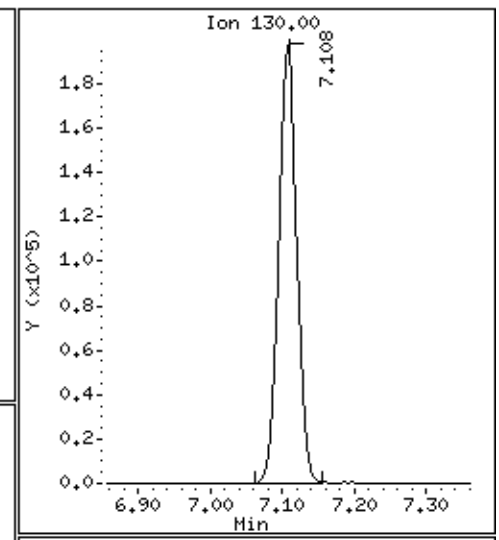
Column phase: RTX VMS 30m

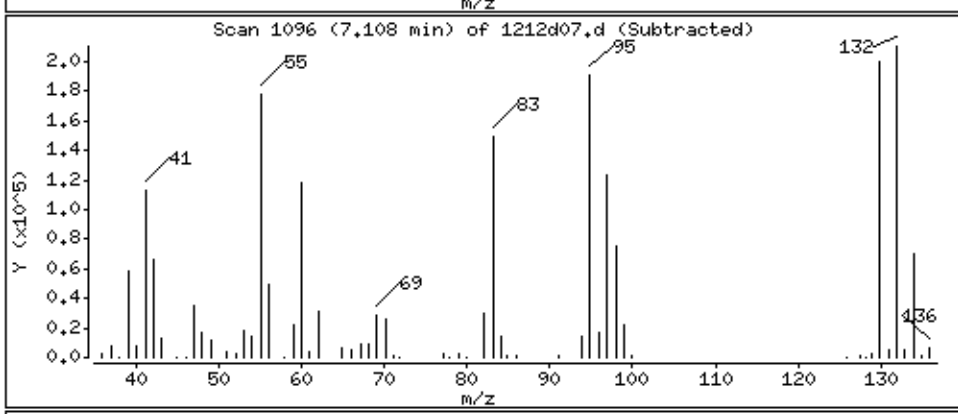
Column diameter: 0.25

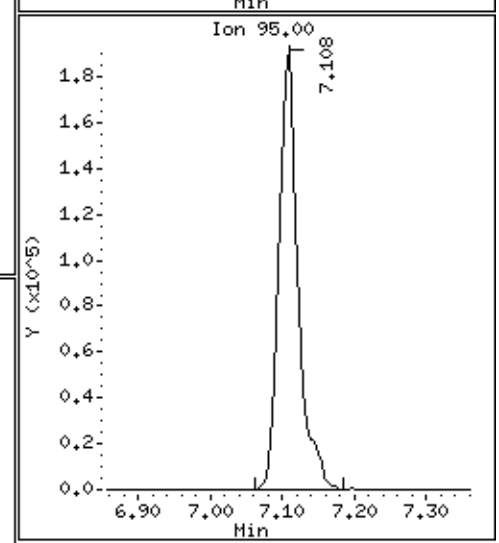
42 Trichloroethene

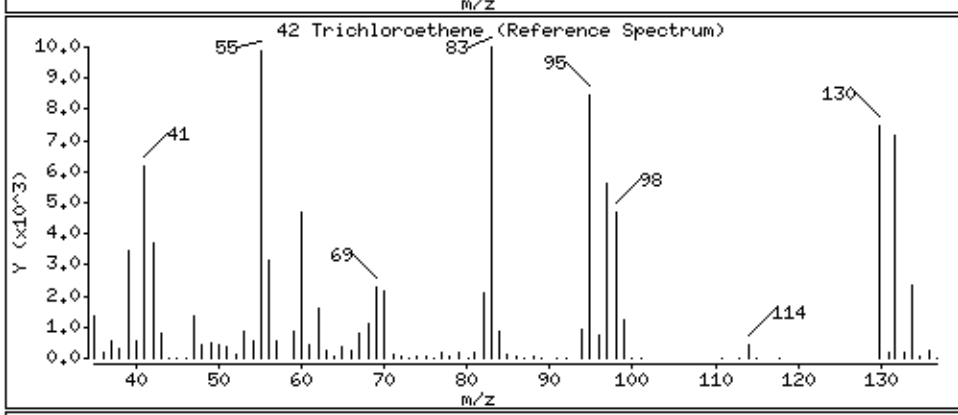
Concentration: 46.4 ug/L

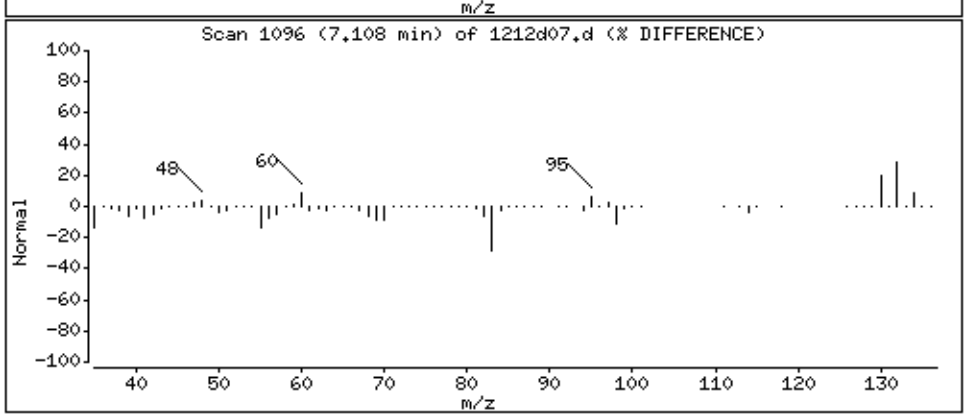












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

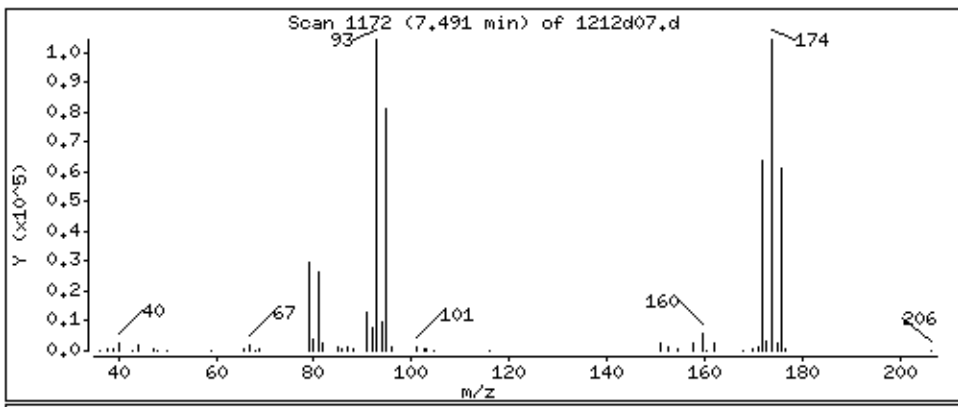
Operator: GEM

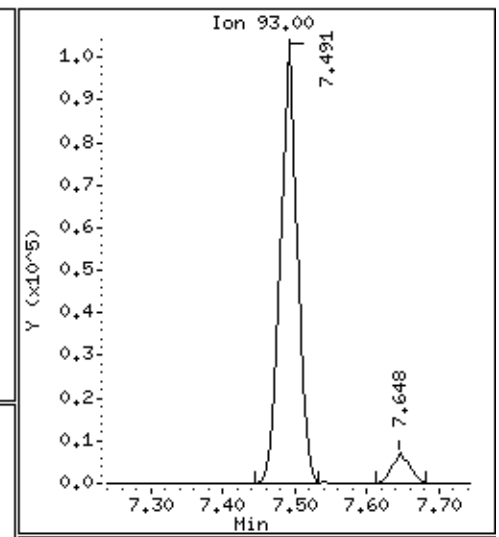
Column phase: RTX VMS 30m

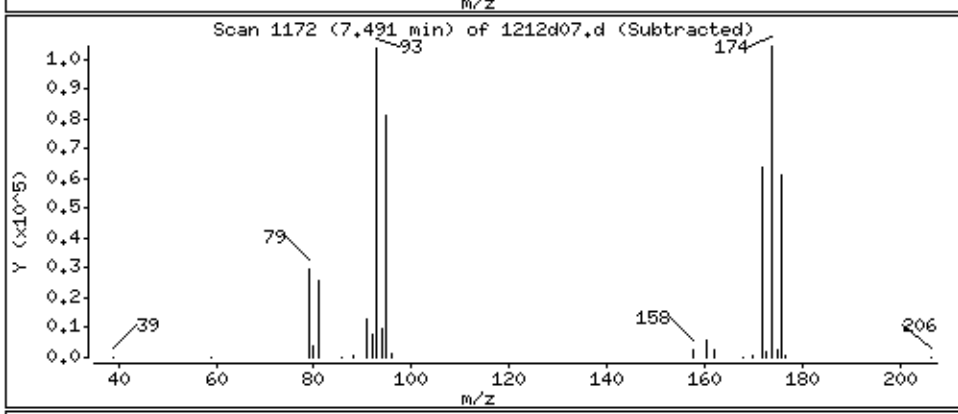
Column diameter: 0.25

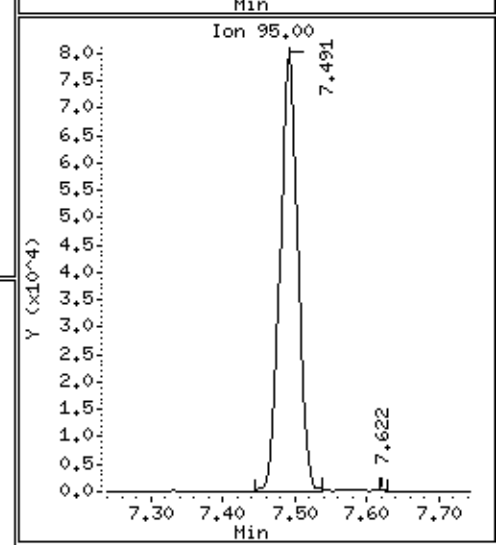
44 Dibromomethane

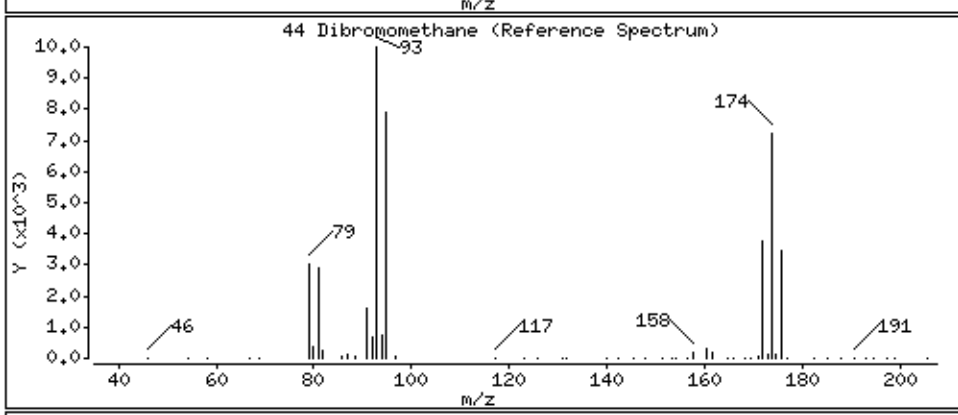
Concentration: 44.4 ug/L

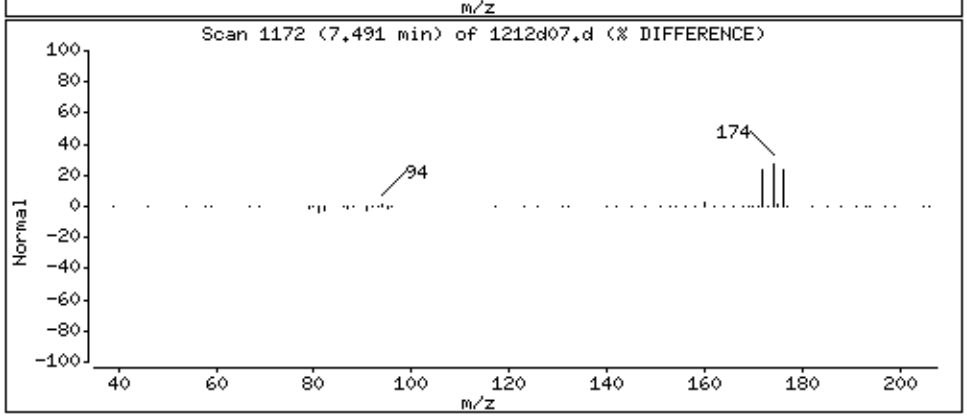












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

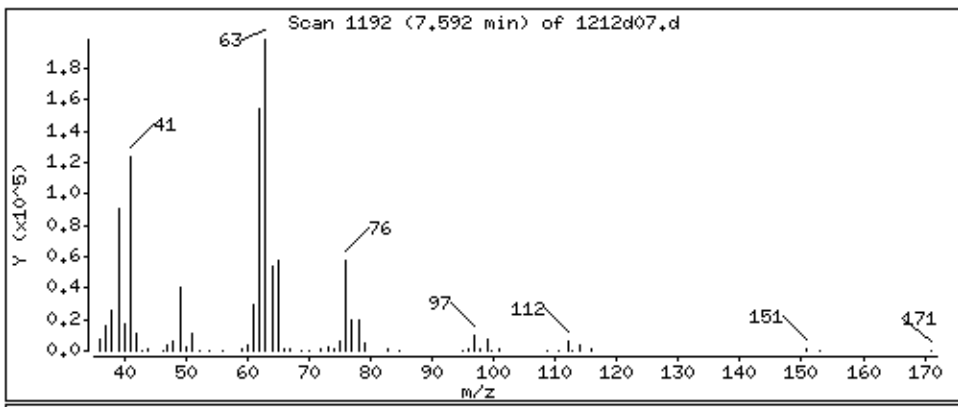
Operator: GEM

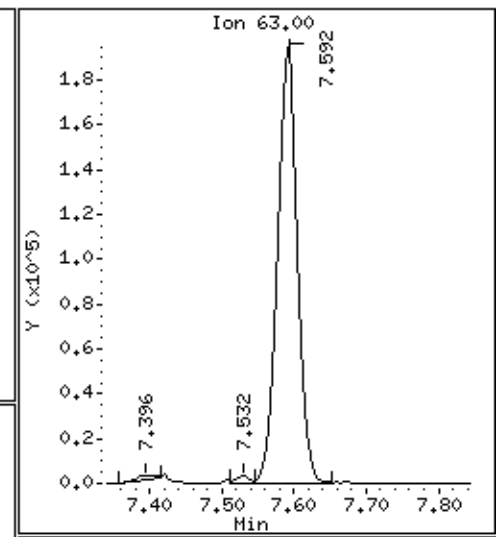
Column phase: RTX VMS 30m

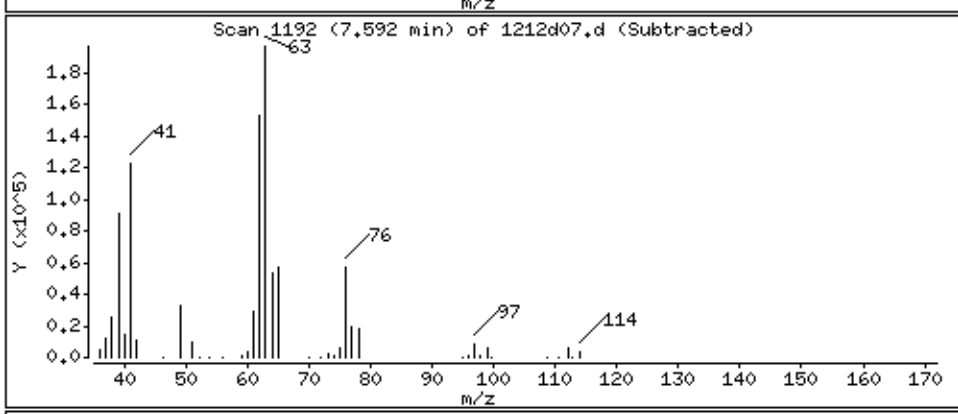
Column diameter: 0.25

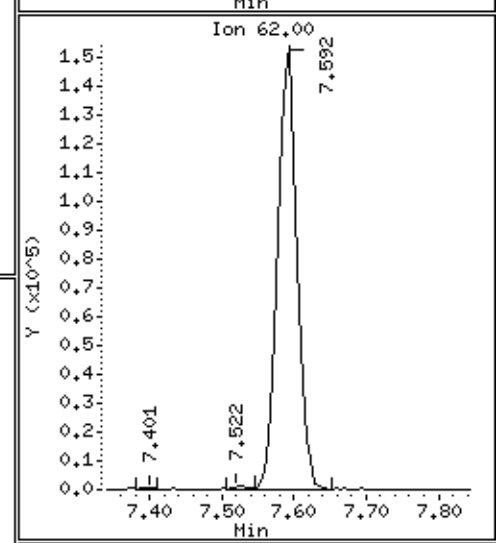
45 1,2-Dichloropropane

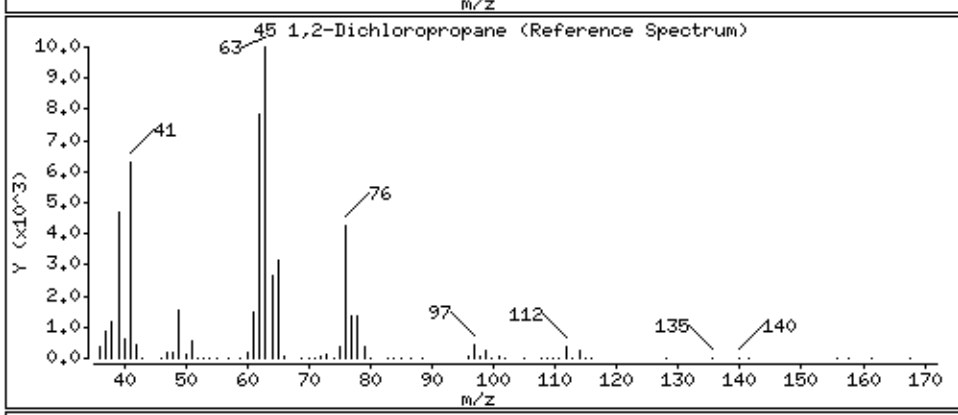
Concentration: 44.5 ug/L

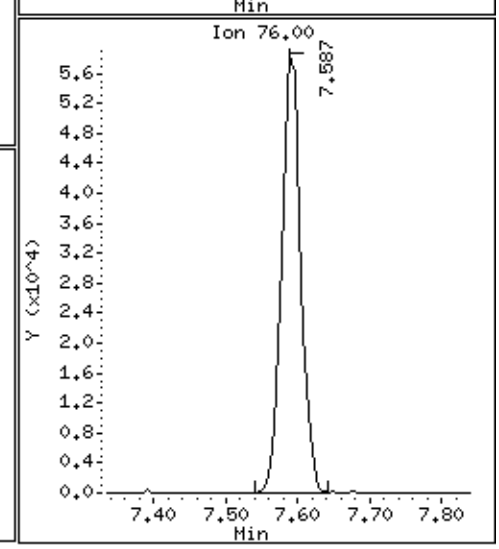


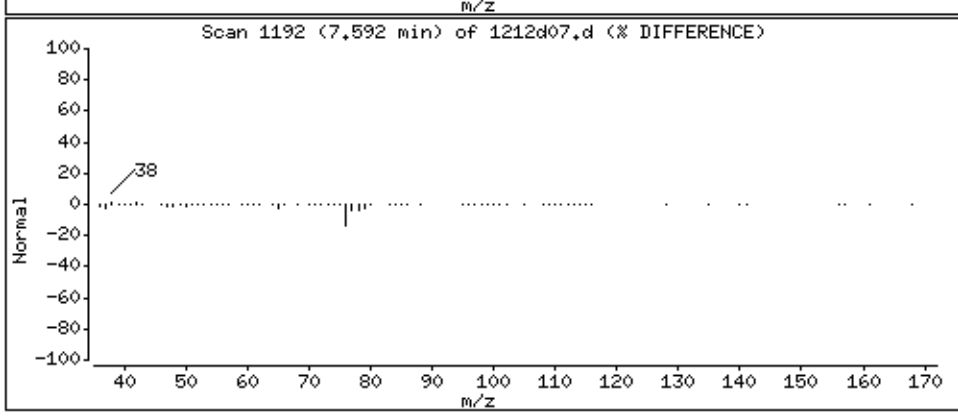












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

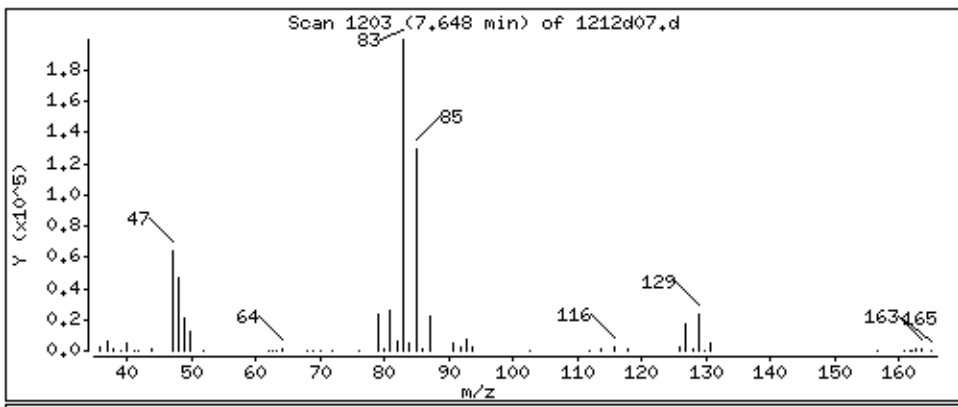
Operator: GEM

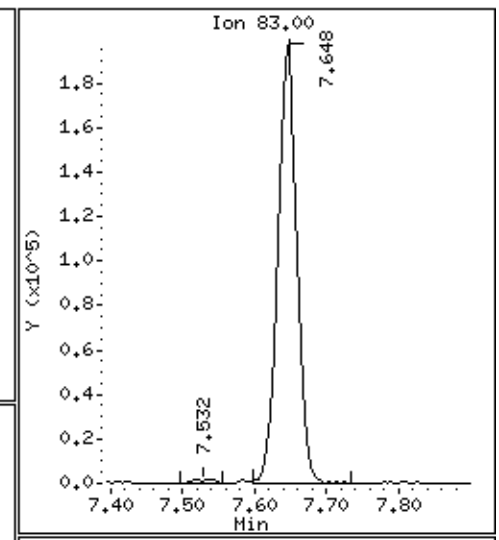
Column phase: RTX VMS 30m

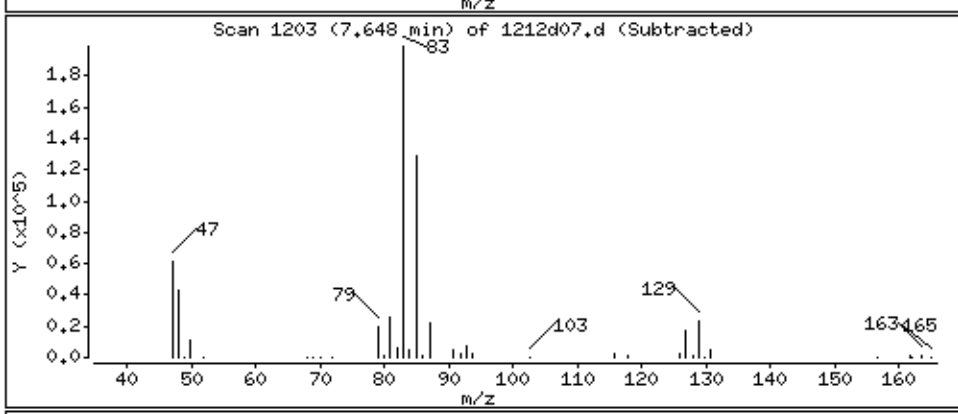
Column diameter: 0.25

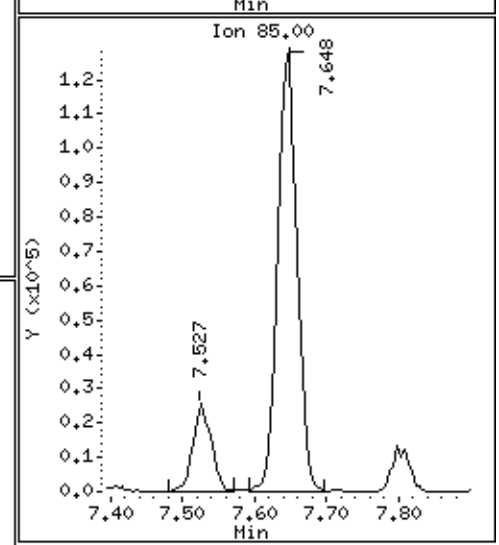
46 Bromodichloromethane

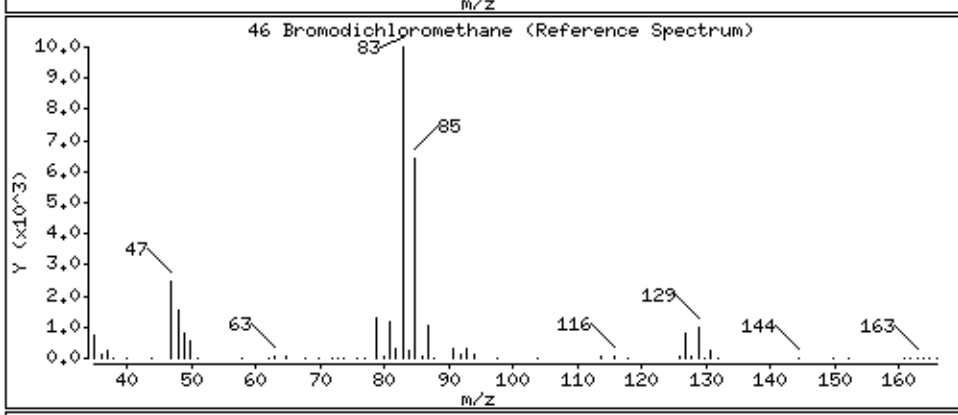
Concentration: 46.2 ug/L

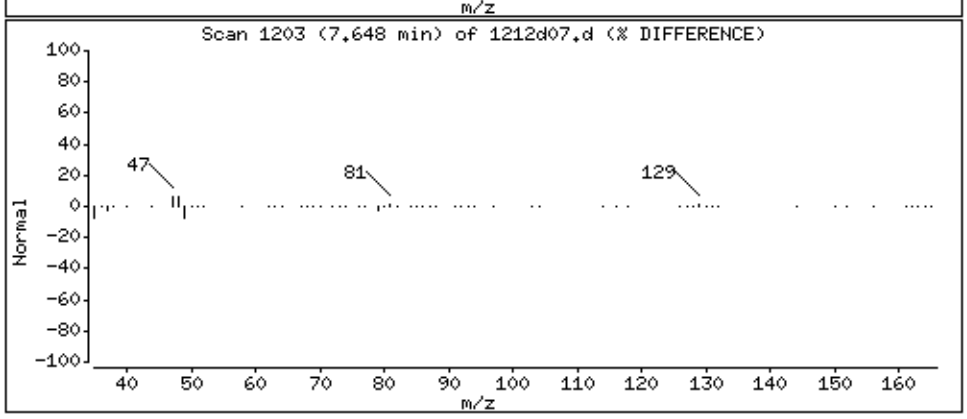












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

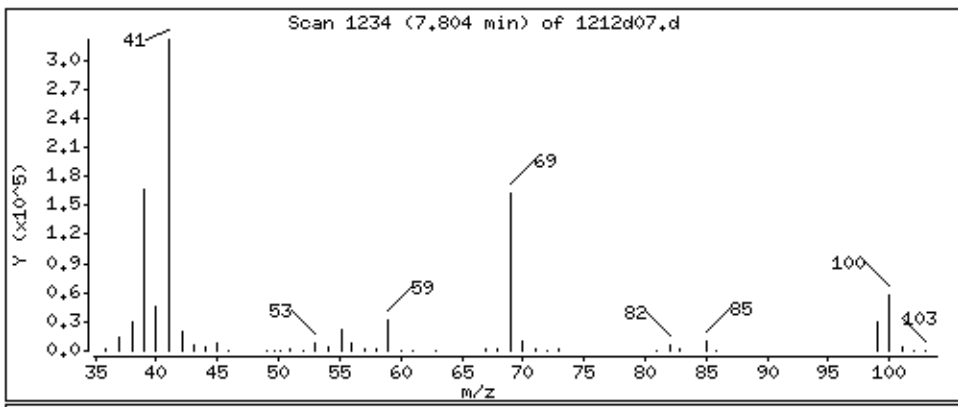
Operator: GEM

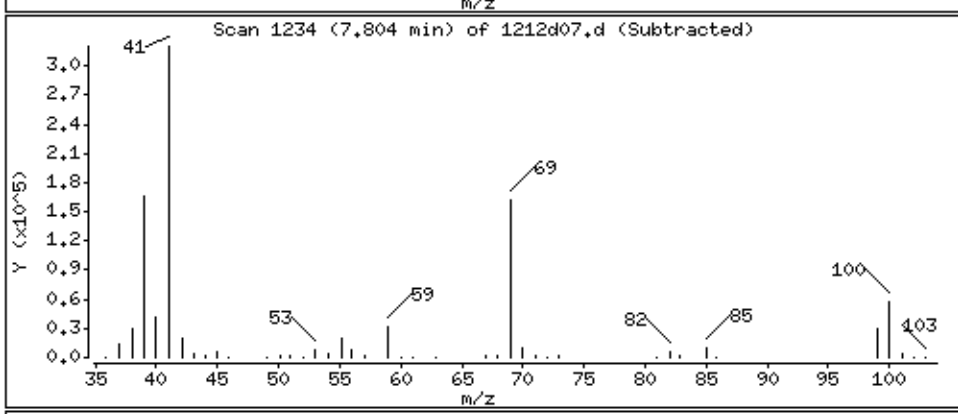
Column phase: RTX VMS 30m

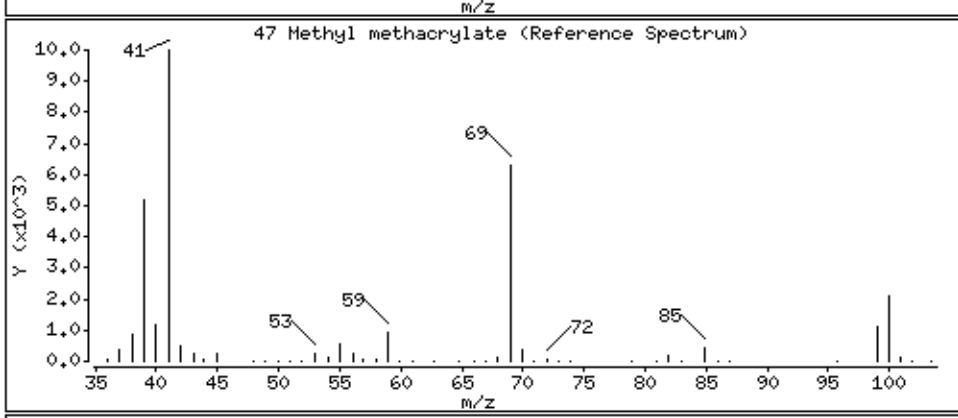
Column diameter: 0.25

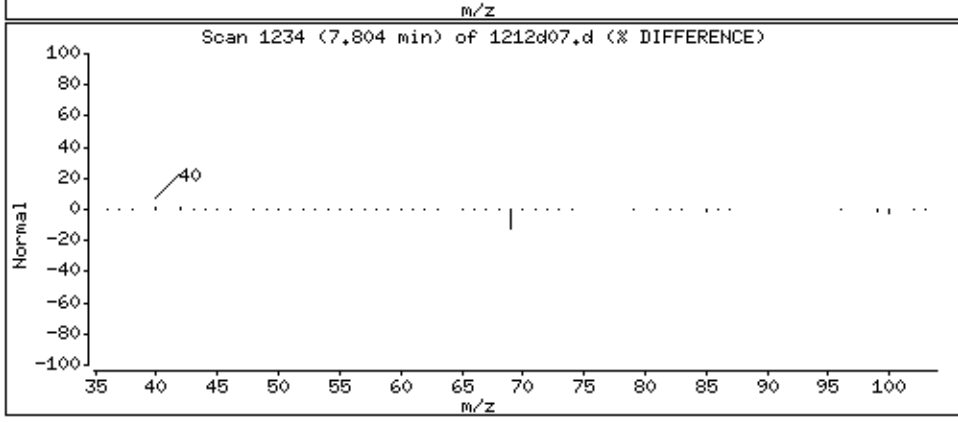
47 Methyl methacrylate

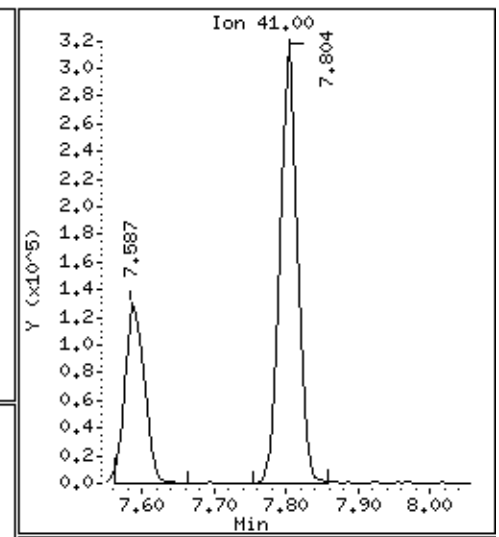
Concentration: 88.4 ug/L

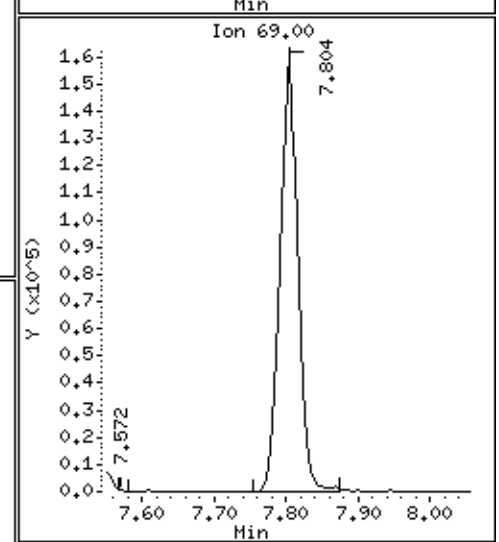


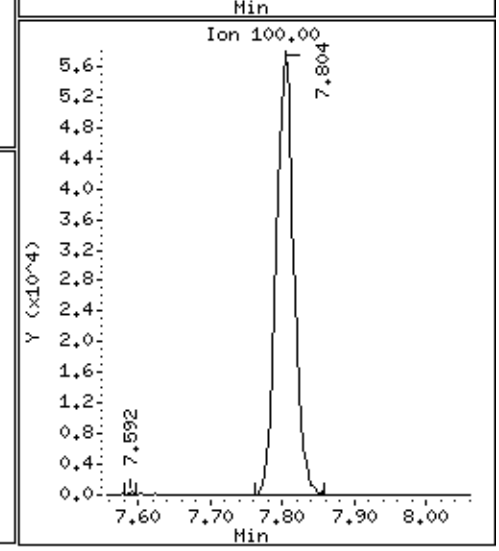












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

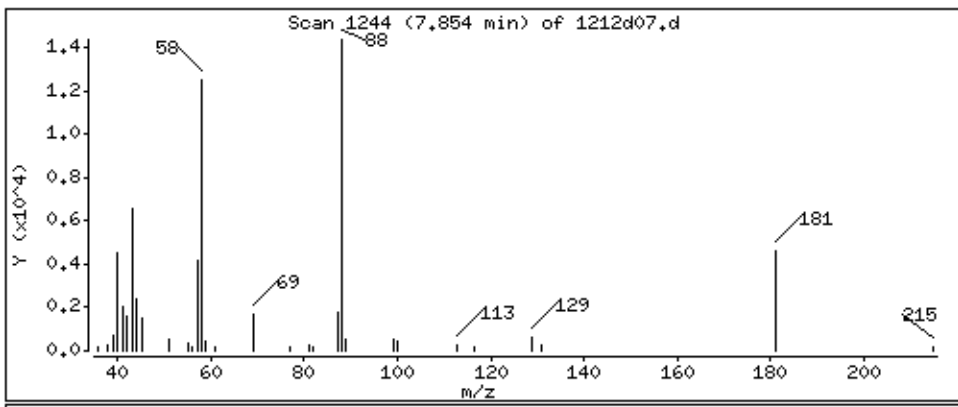
Operator: GEM

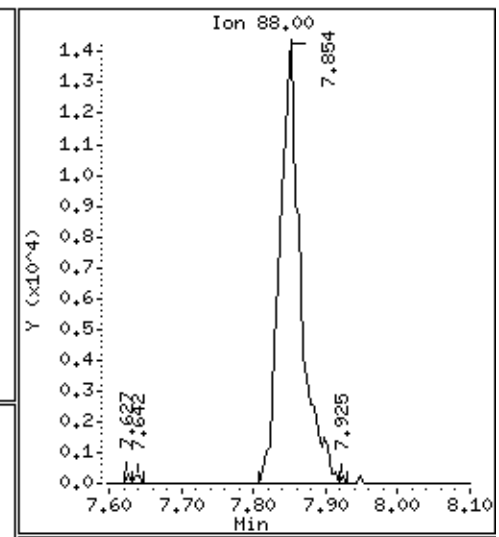
Column phase: RTX VMS 30m

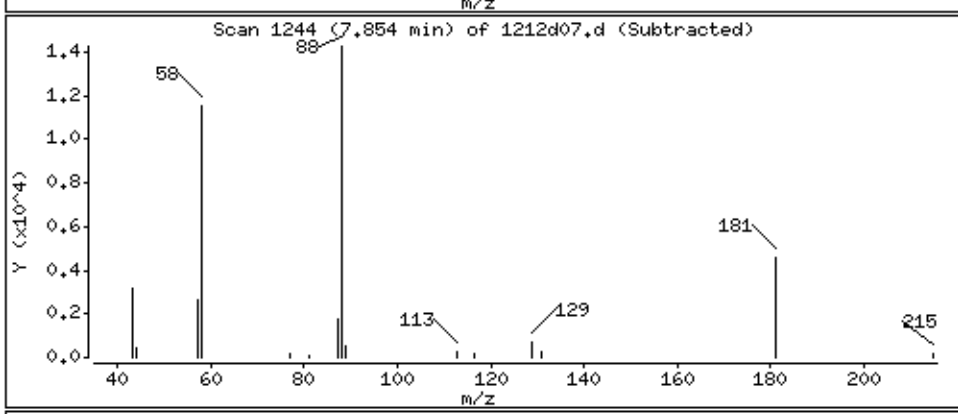
Column diameter: 0.25

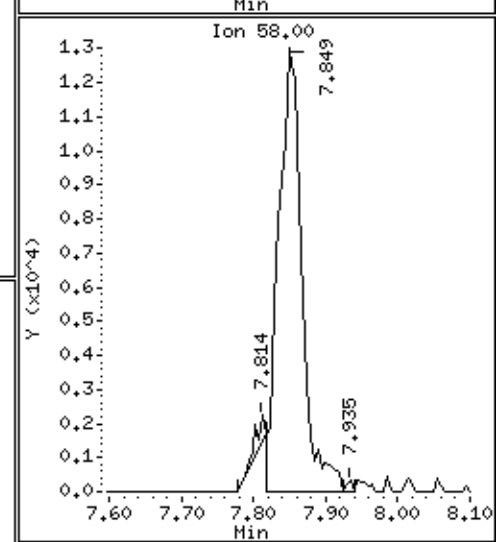
48 1,4-Dioxane (p-Dioxane)

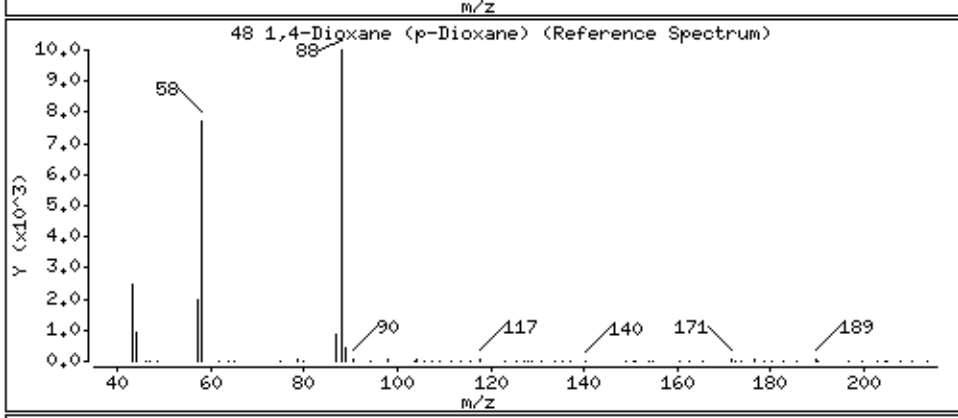
Concentration: 769 ug/L

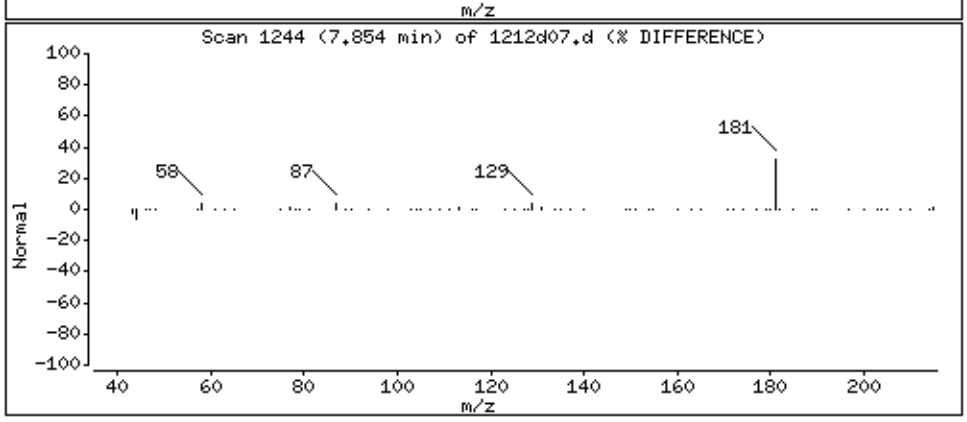












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

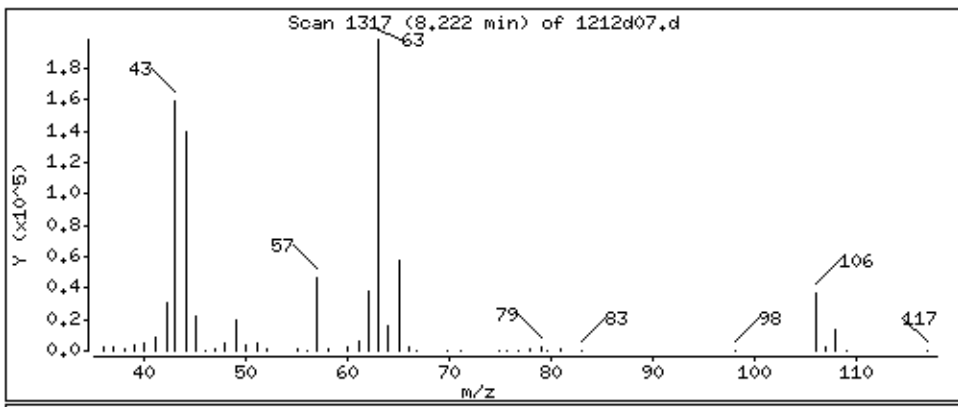
Operator: GEM

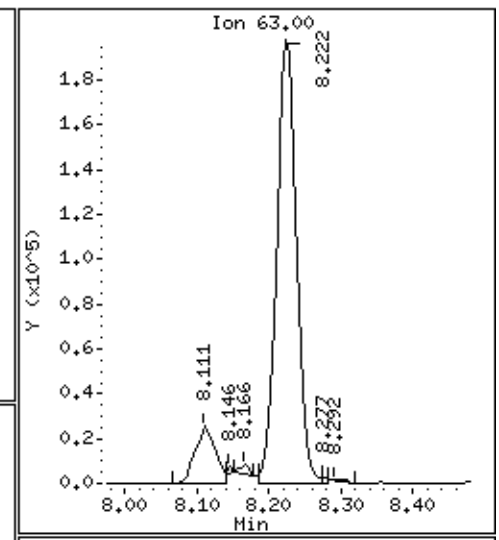
Column phase: RTX VMS 30m

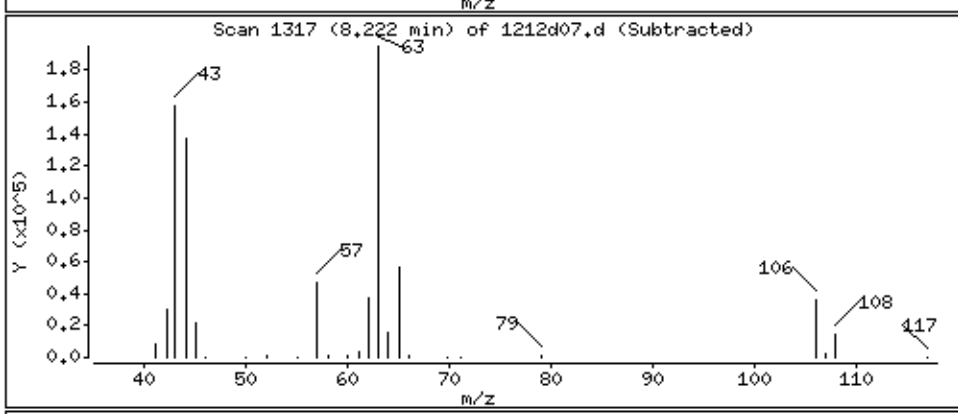
Column diameter: 0.25

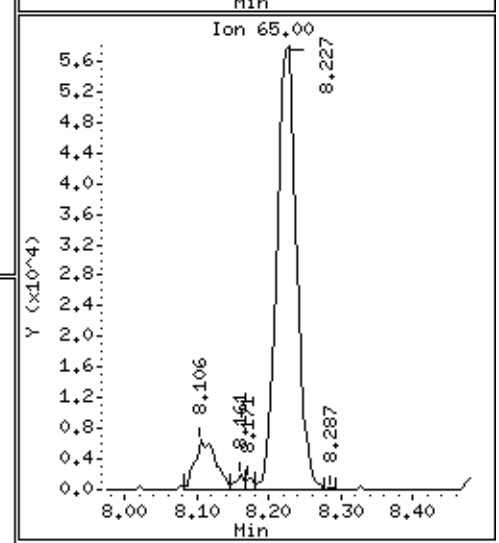
49 2-Chloroethyl vinyl ether

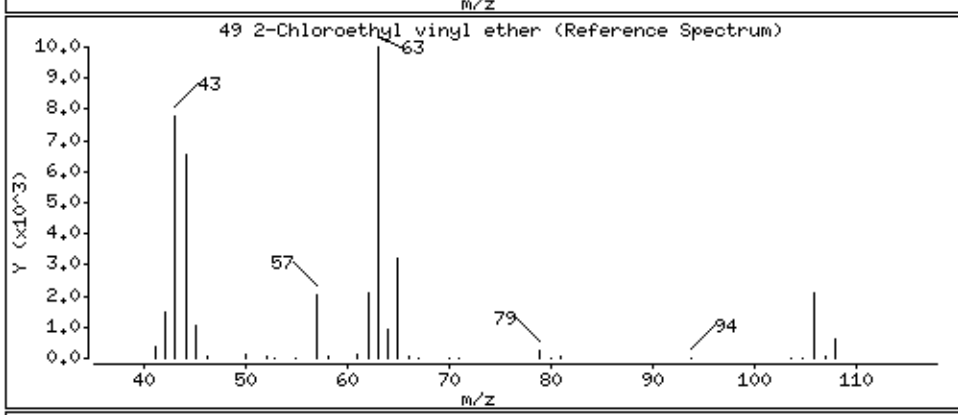
Concentration: 90.0 ug/L

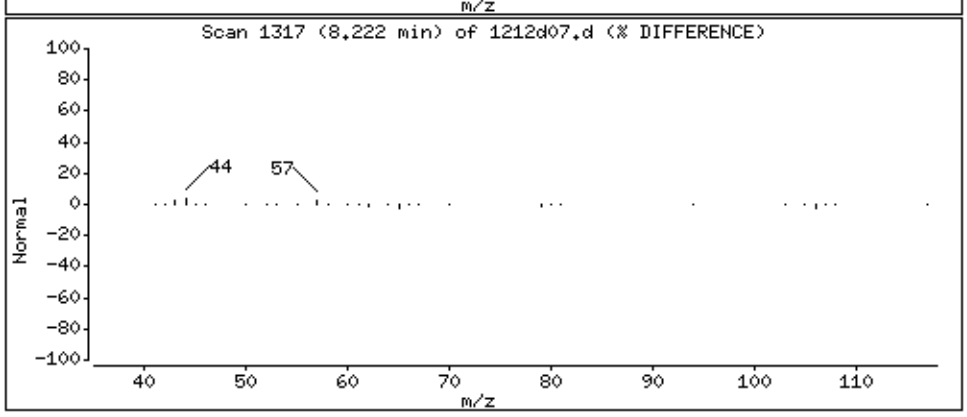












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

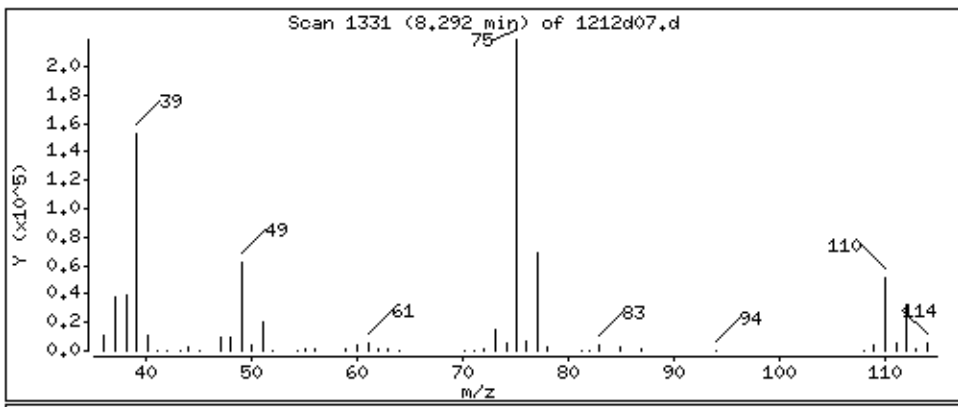
Client ID: MBLCS | Instrument: 20msvd.i

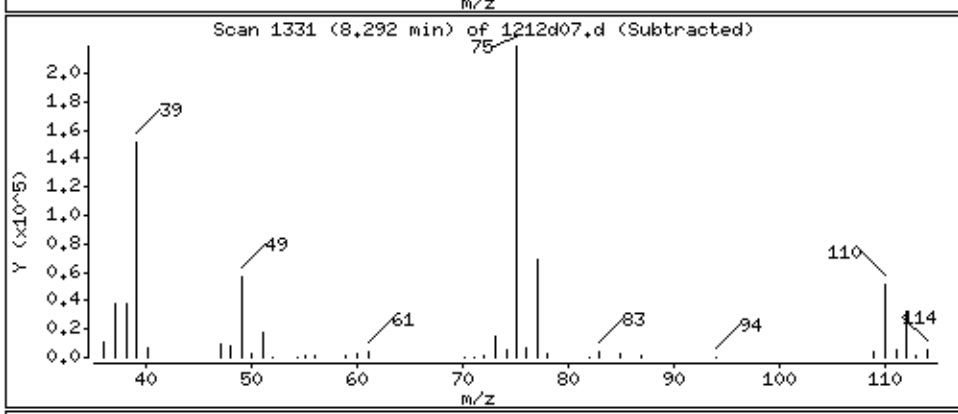
Sample Info: 415095,SPK

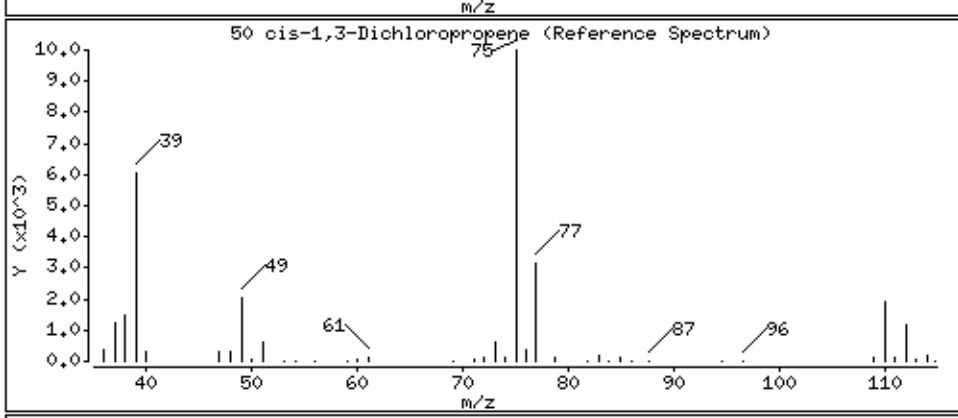
Purge Volume: 5.0 | Operator: GEM

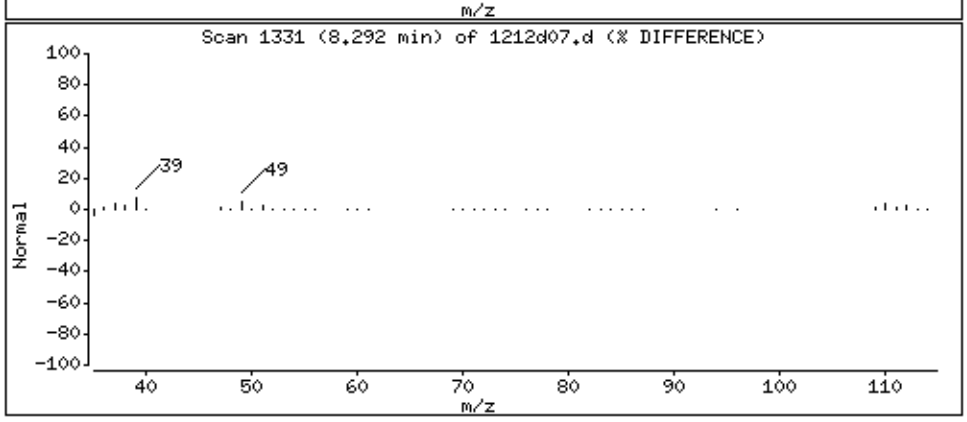
Column phase: RTX VMS 30m | Column diameter: 0.25

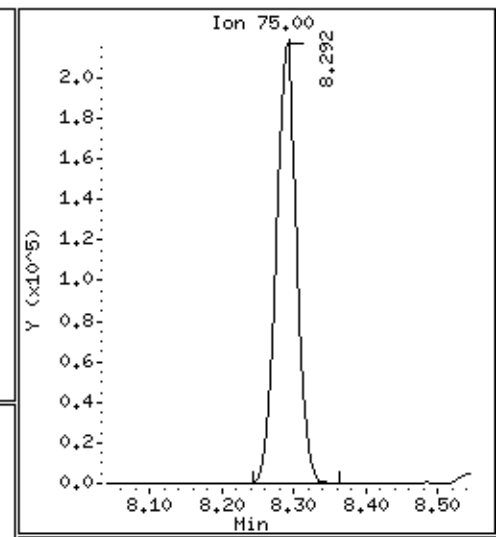
50 cis-1,3-Dichloropropene | Concentration: 46.8 ug/L

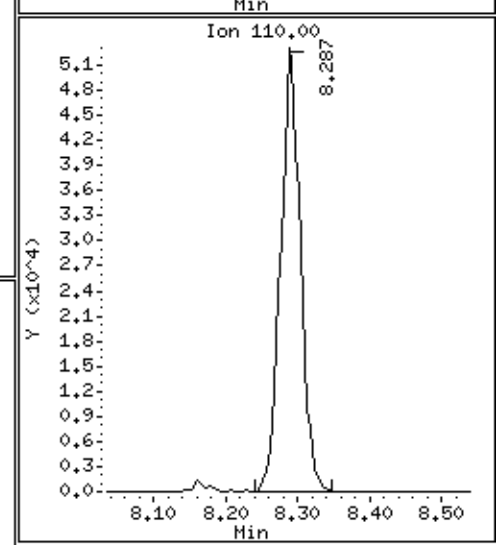












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

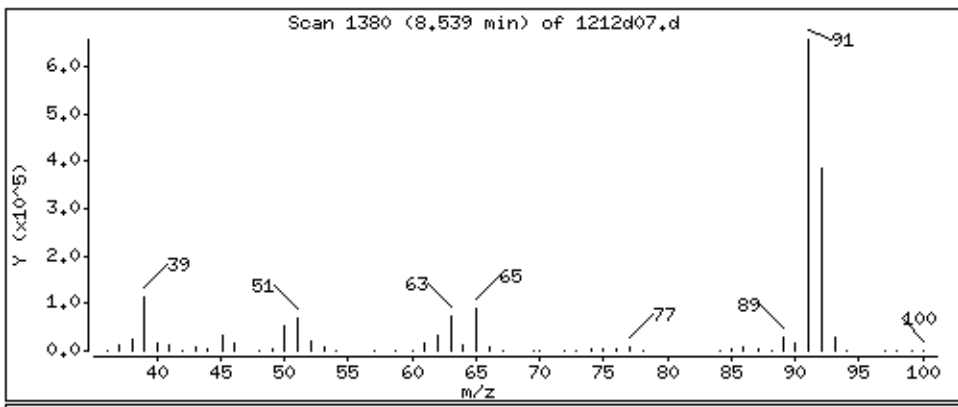
Operator: GEM

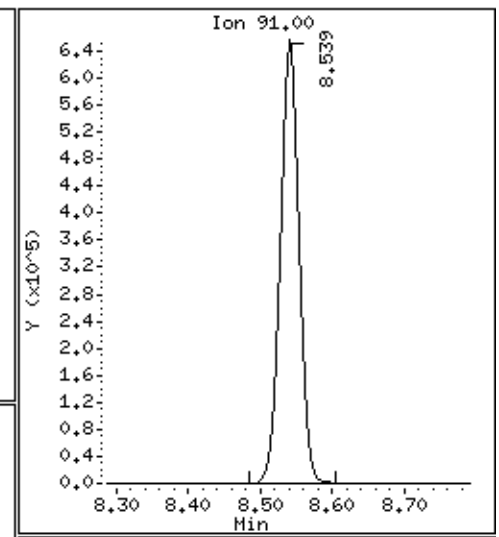
Column phase: RTX VMS 30m

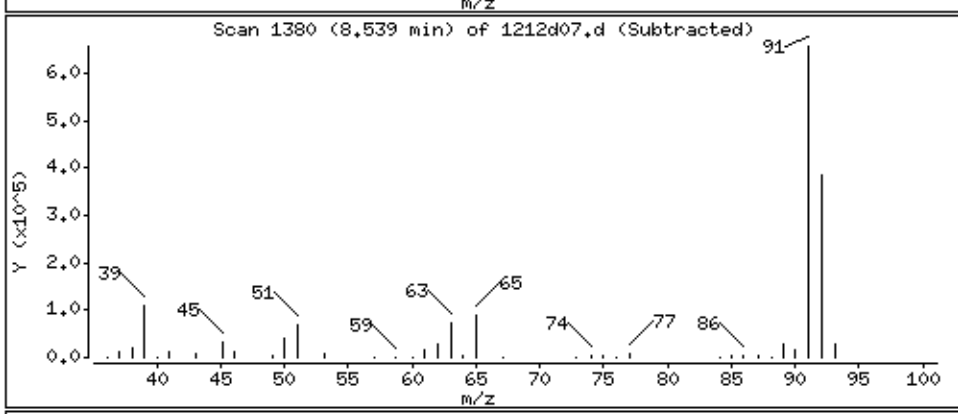
Column diameter: 0.25

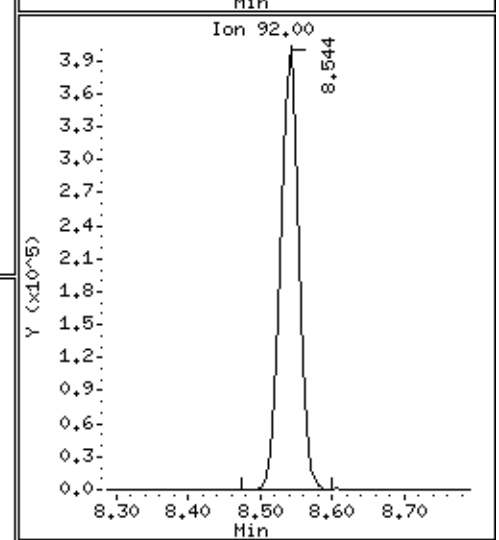
52 Toluene

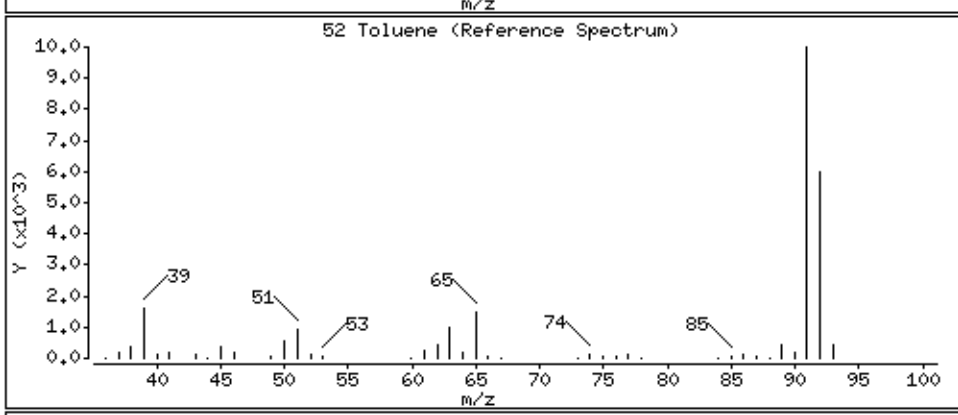
Concentration: 46.4 ug/L

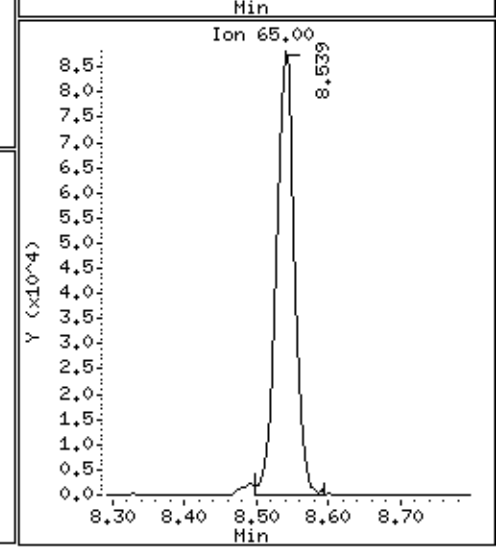


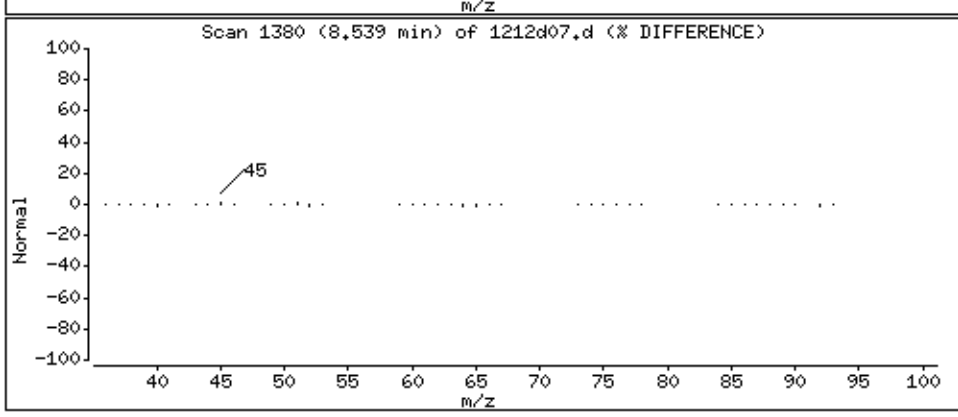












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

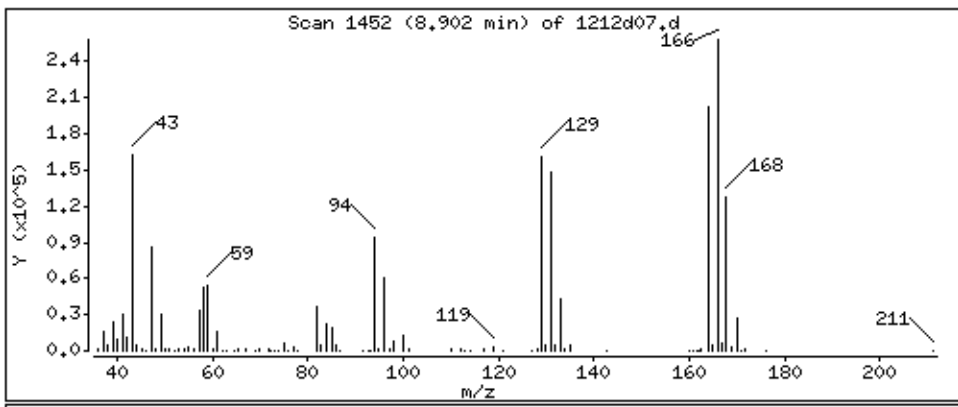
Operator: GEM

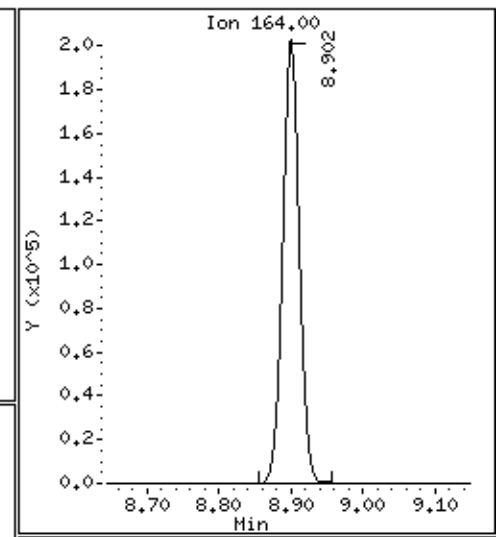
Column phase: RTX VMS 30m

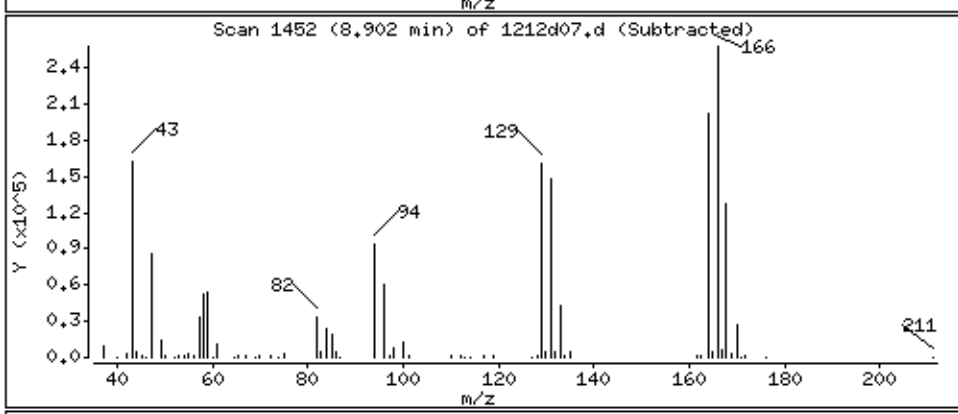
Column diameter: 0.25

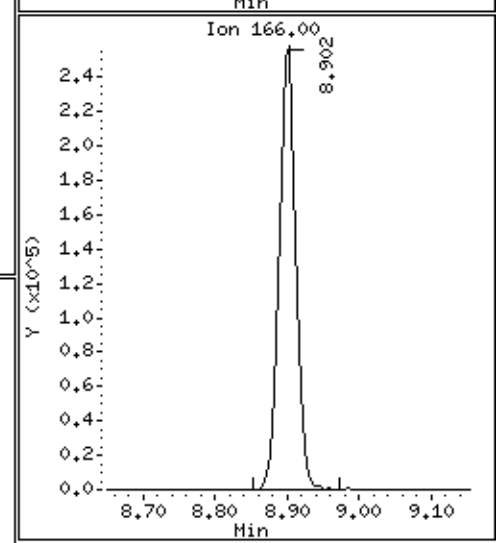
53 Tetrachloroethene

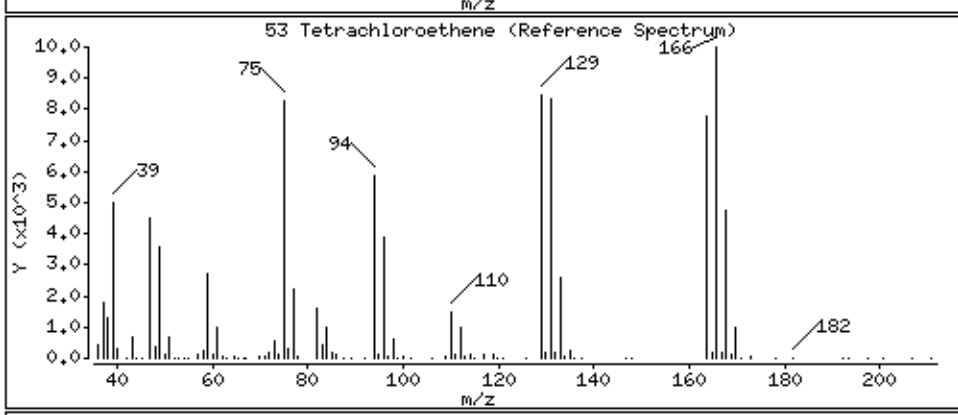
Concentration: 54.5 ug/L

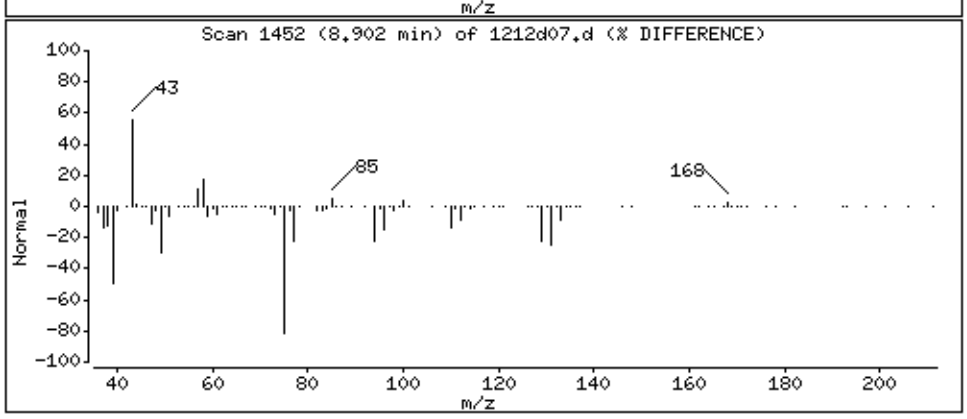












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

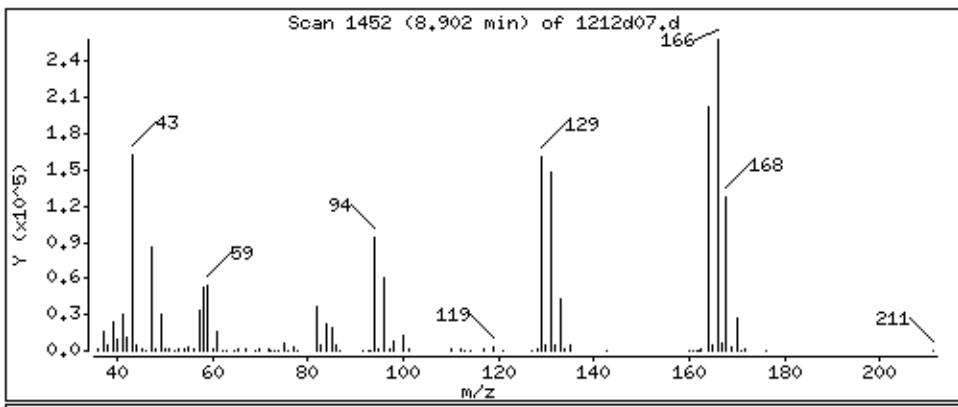
Operator: GEM

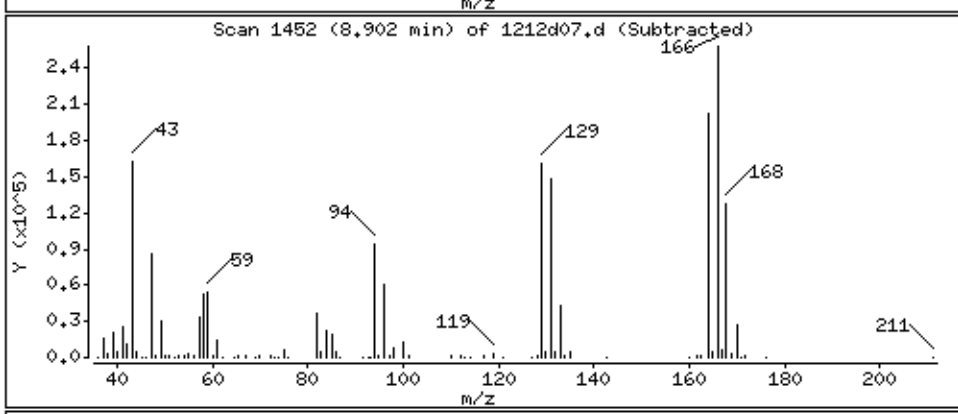
Column phase: RTX VMS 30m

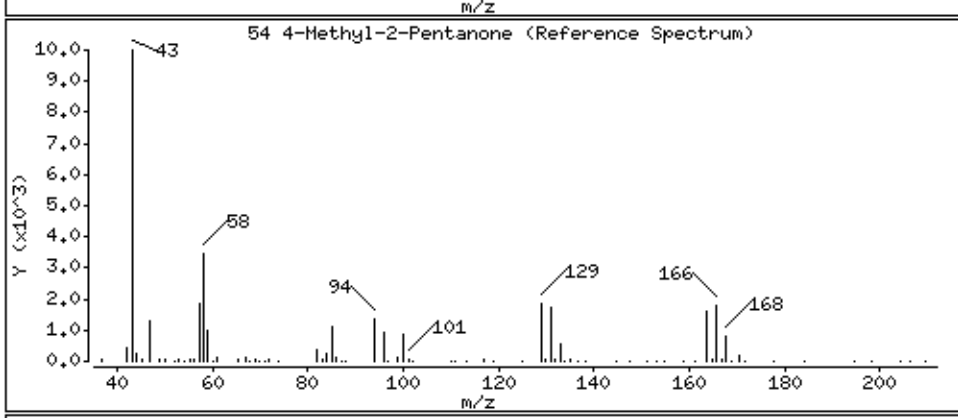
Column diameter: 0.25

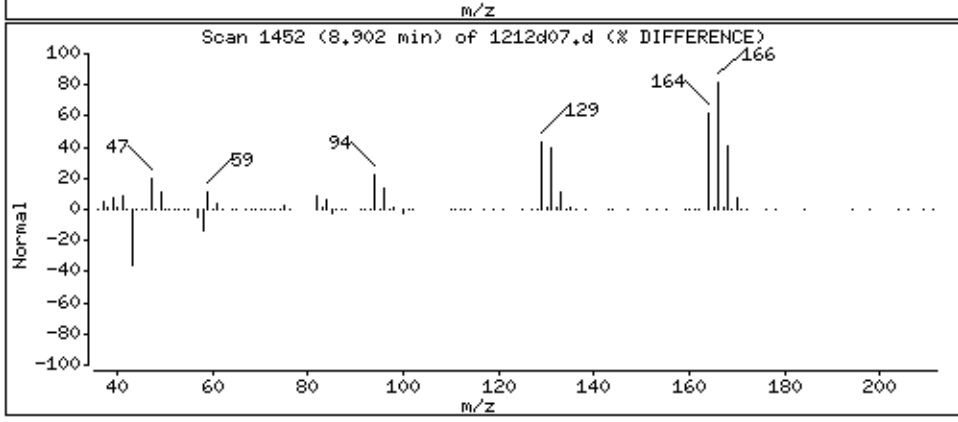
54 4-Methyl-2-Pentanone

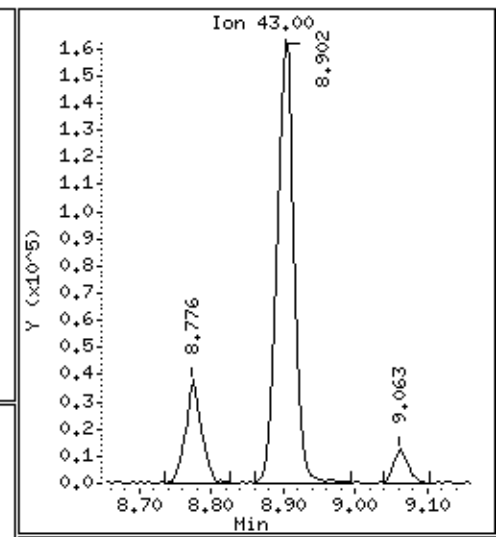
Concentration: 47.5 ug/L

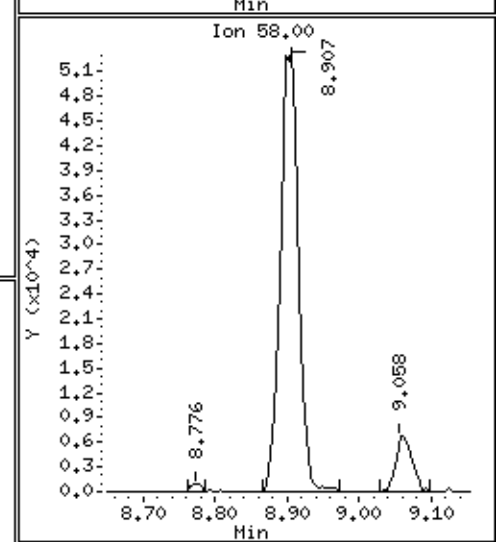


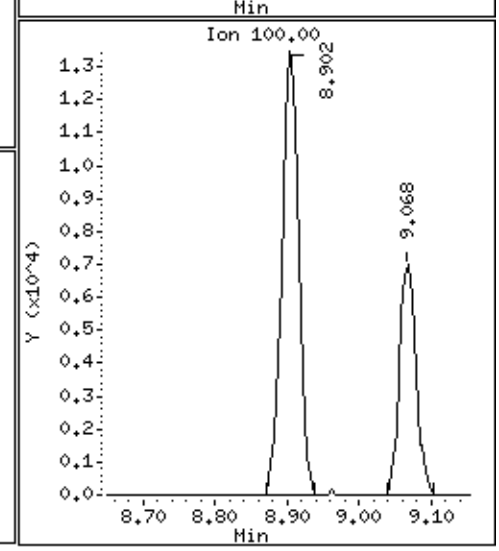












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

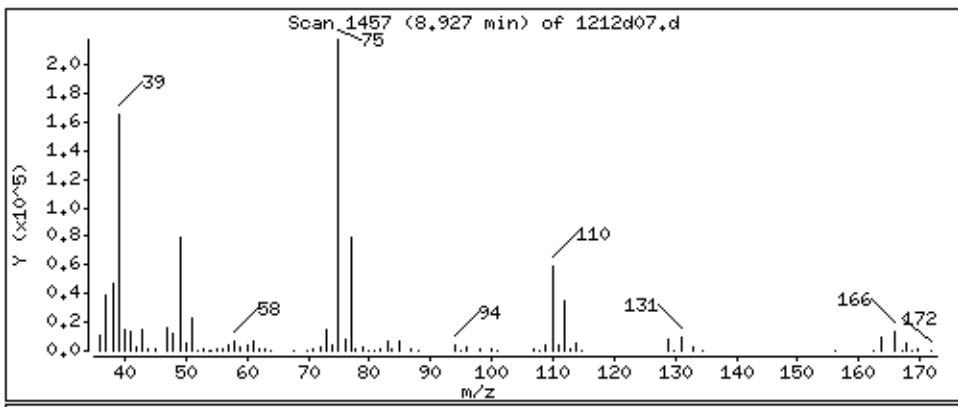
Operator: GEM

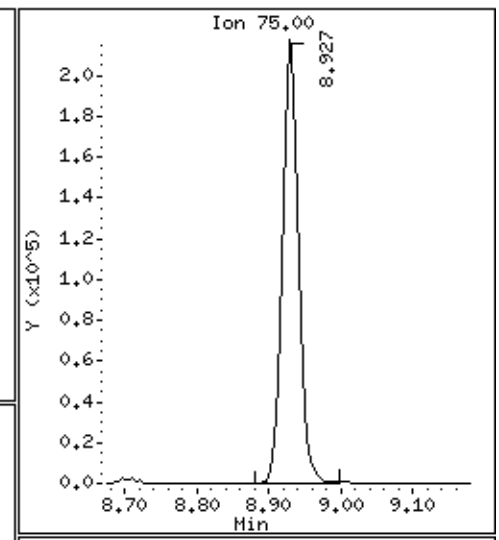
Column phase: RTX VMS 30m

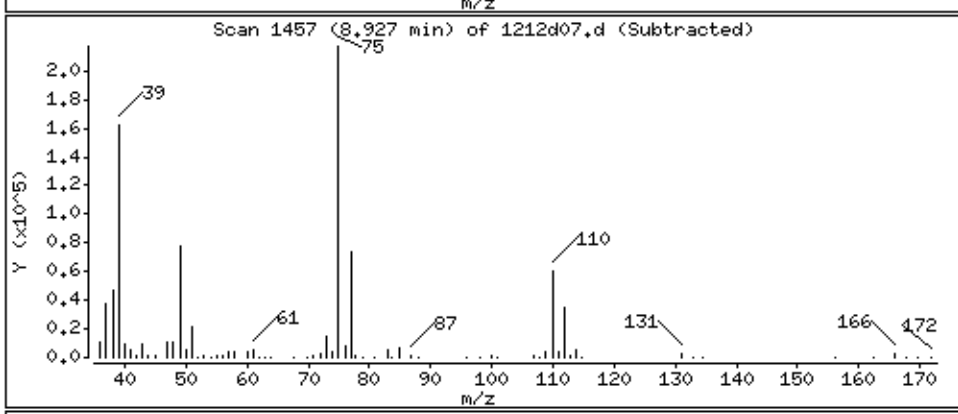
Column diameter: 0.25

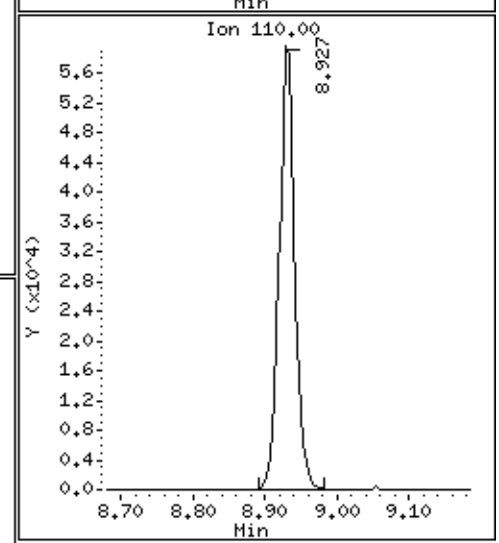
55 trans-1,3-Dichloropropene

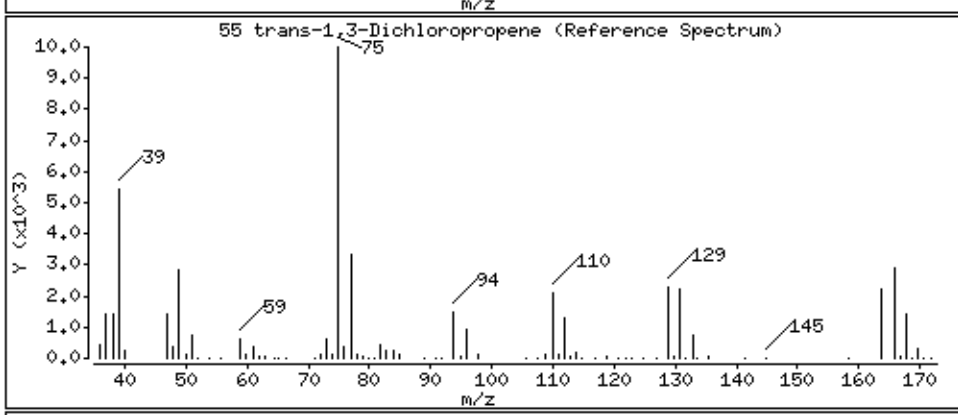
Concentration: 45.5 ug/L

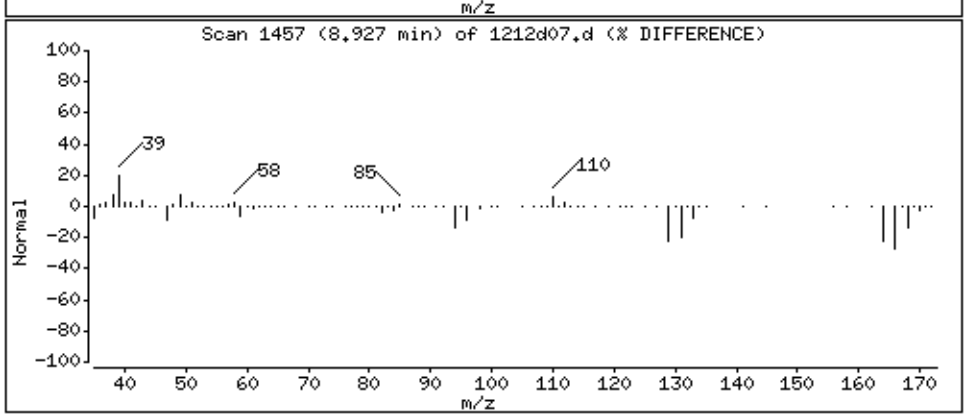












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

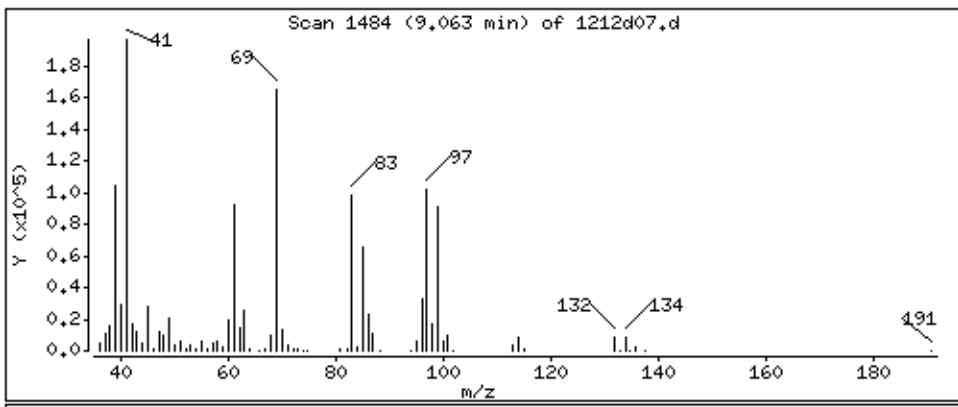
Operator: GEM

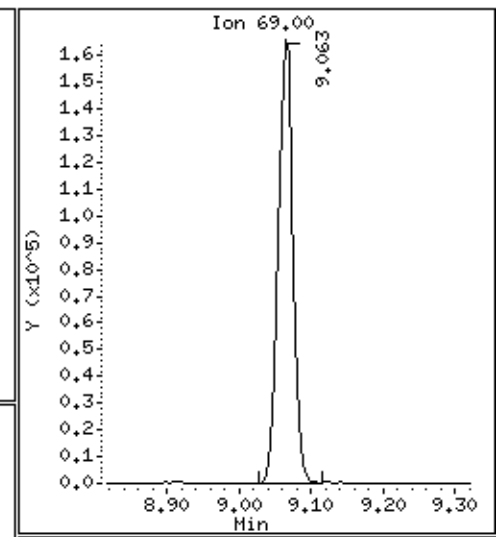
Column phase: RTX VMS 30m

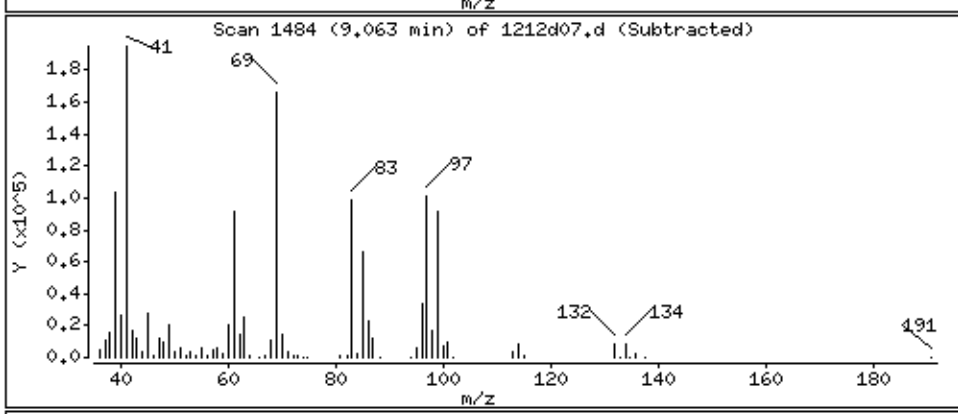
Column diameter: 0.25

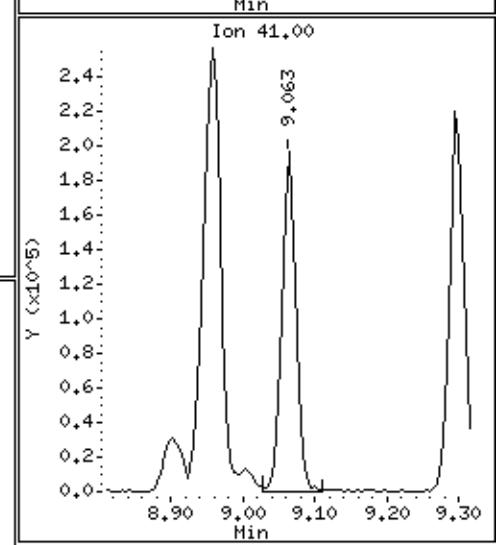
56 Ethyl methacrylate

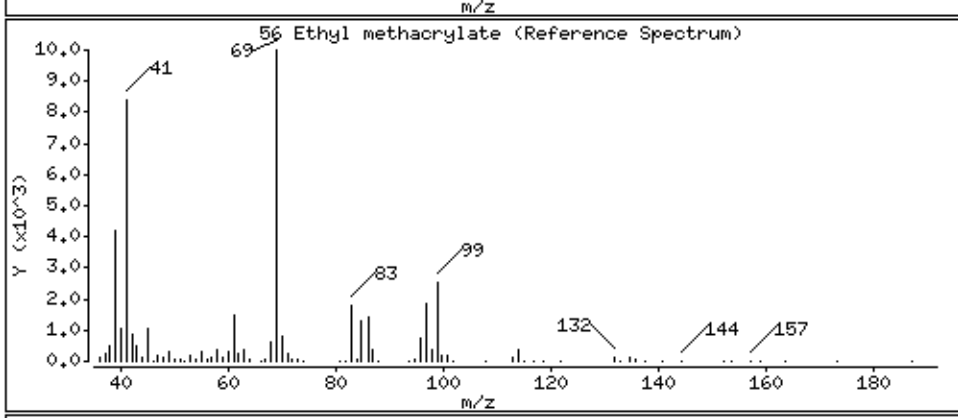
Concentration: 47.0 ug/L

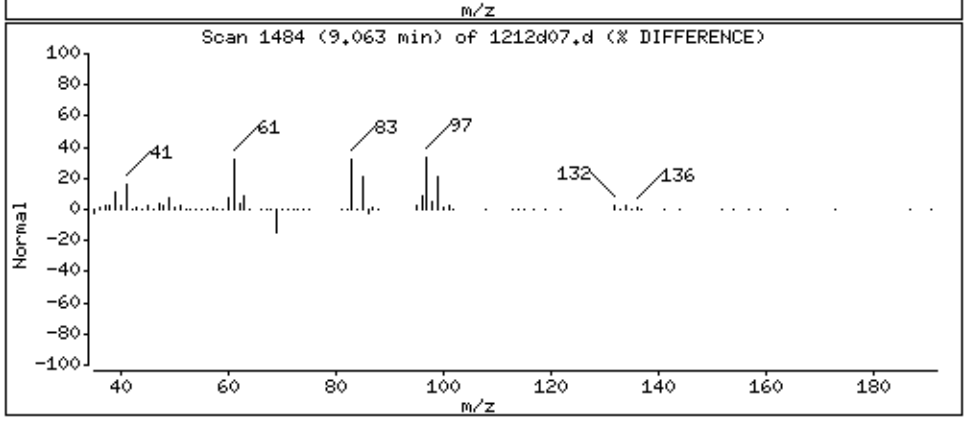












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

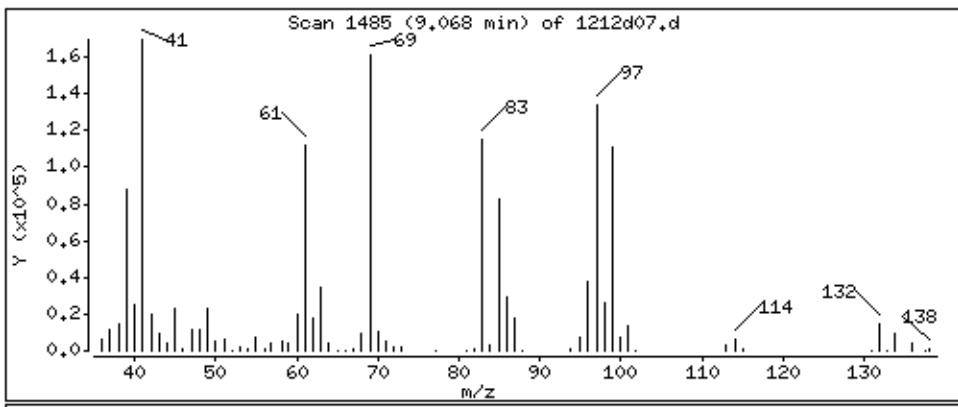
Operator: GEM

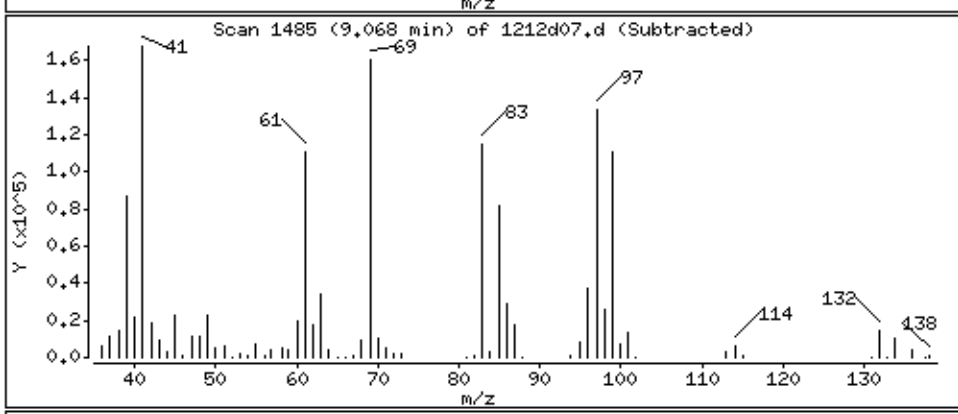
Column phase: RTX VMS 30m

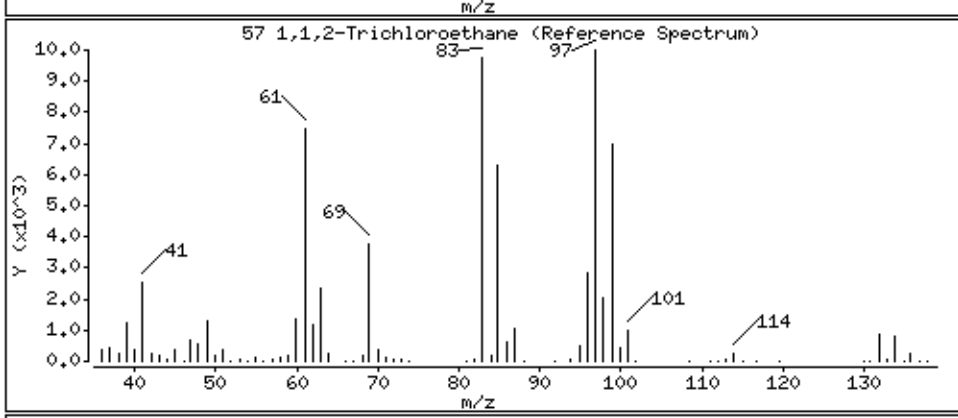
Column diameter: 0.25

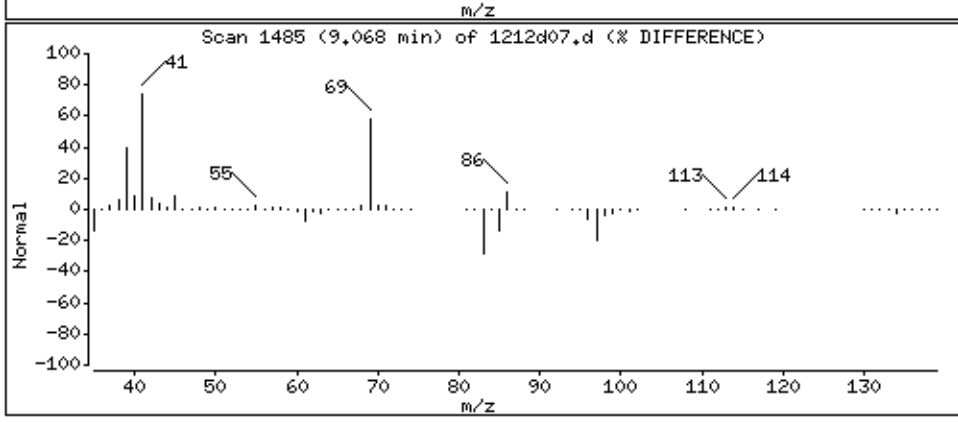
57 1,1,2-Trichloroethane

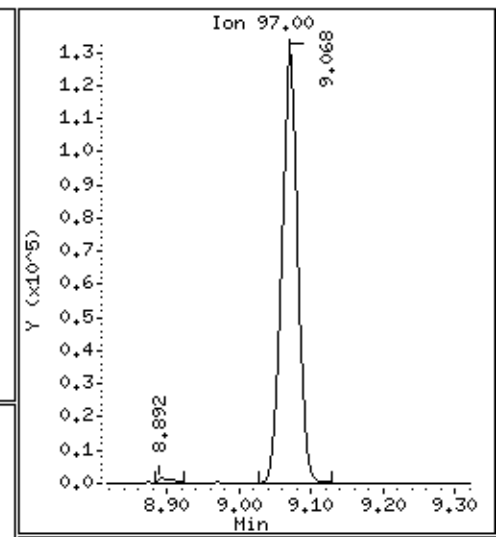
Concentration: 43.3 ug/L

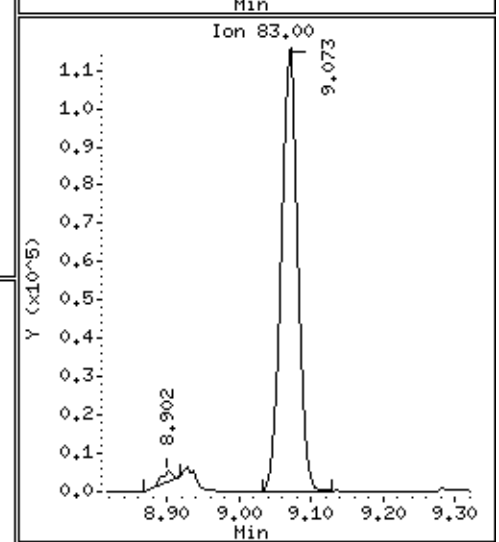


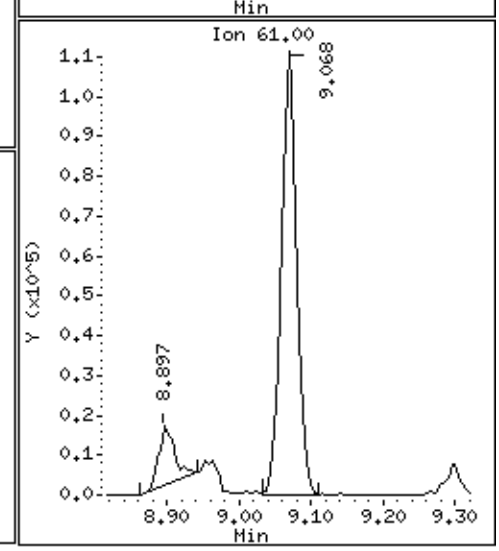












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

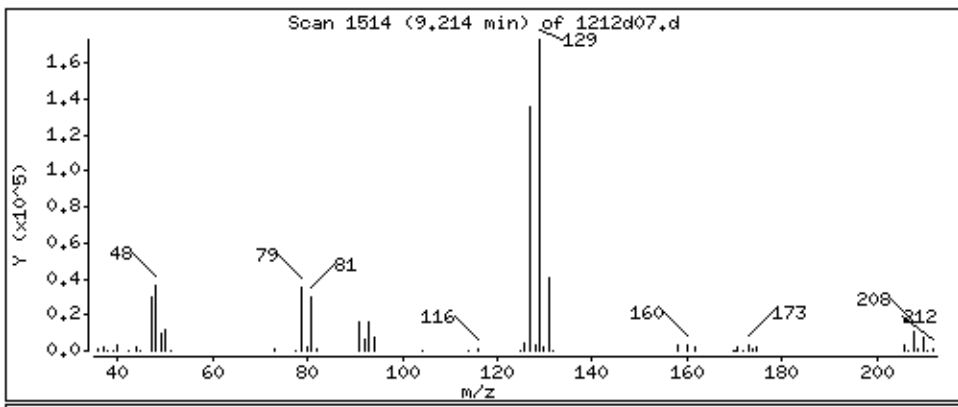
Operator: GEM

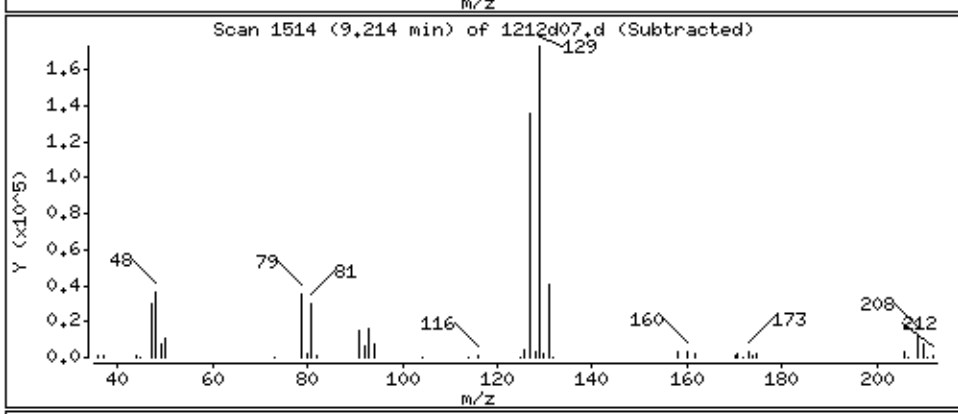
Column phase: RTX VMS 30m

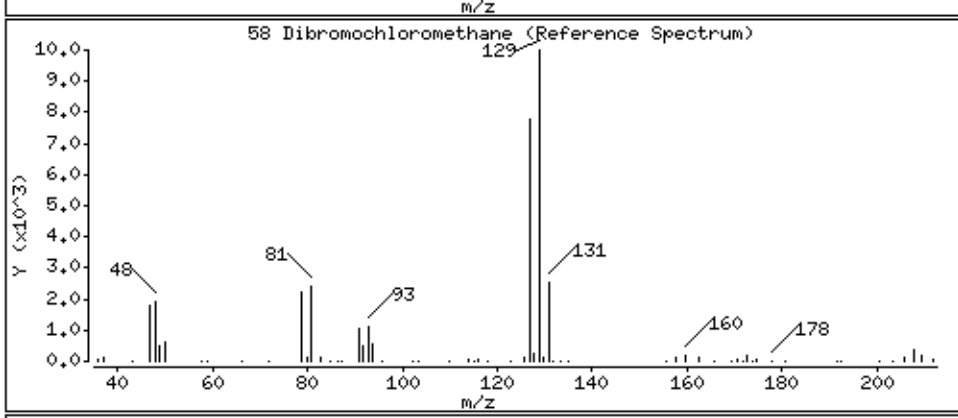
Column diameter: 0.25

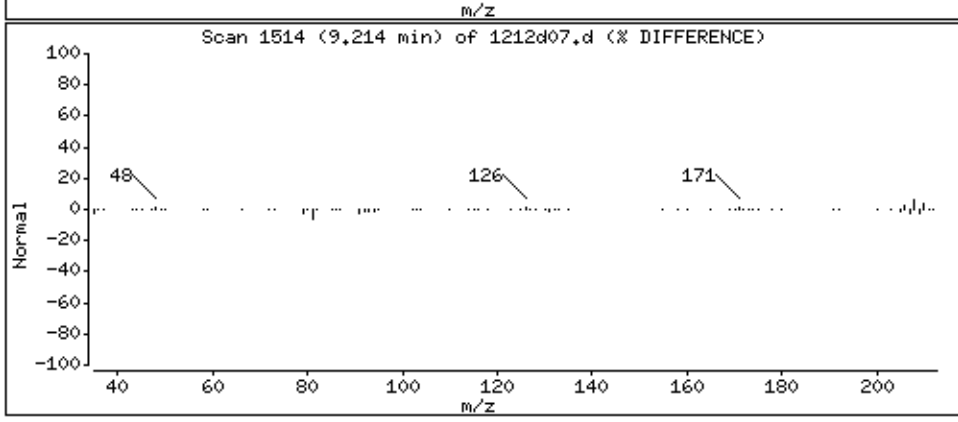
58 Dibromochloromethane

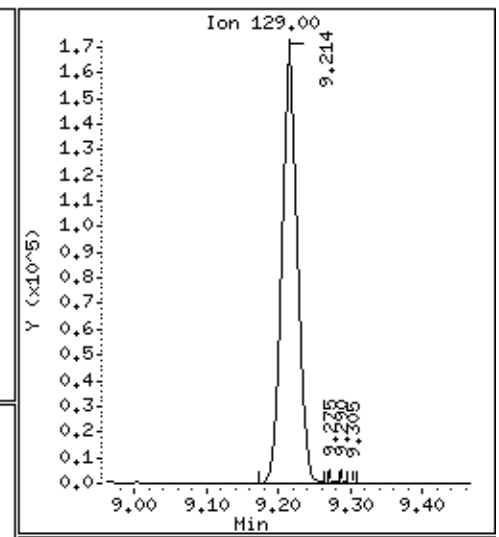
Concentration: 44.1 ug/L

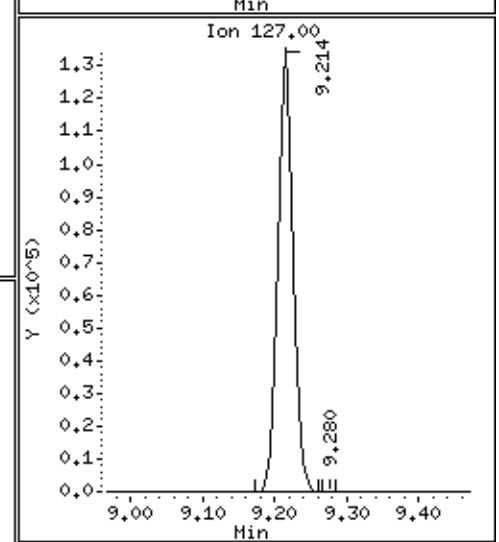


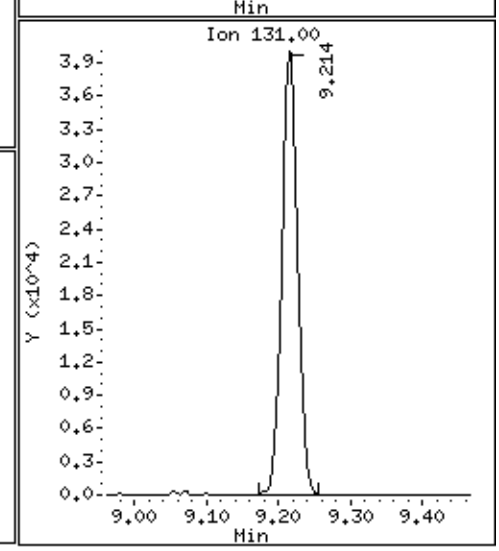












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

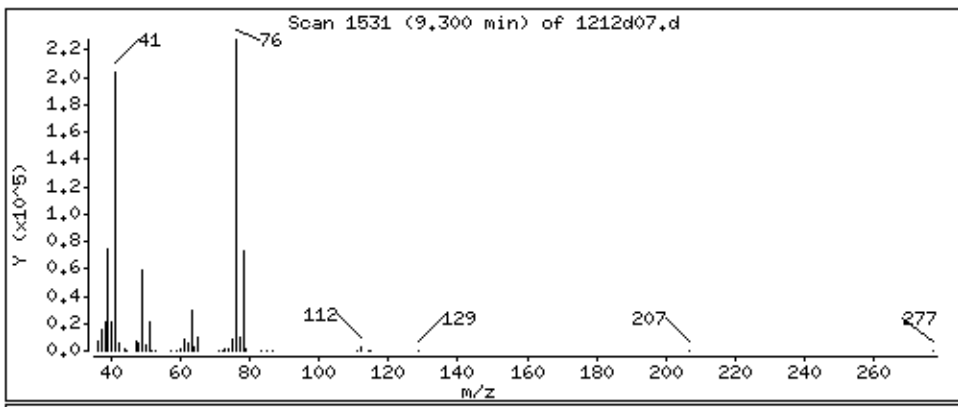
Operator: GEM

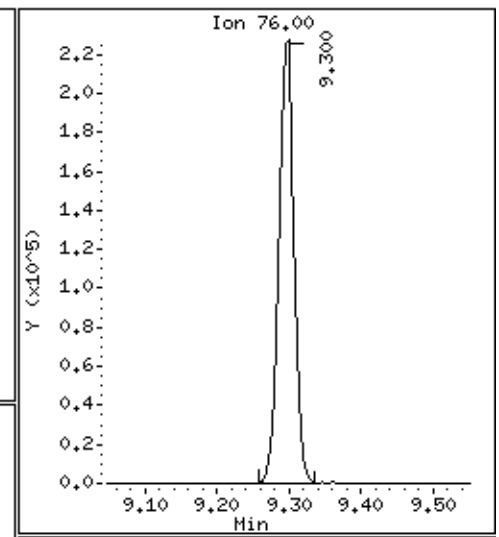
Column phase: RTX VMS 30m

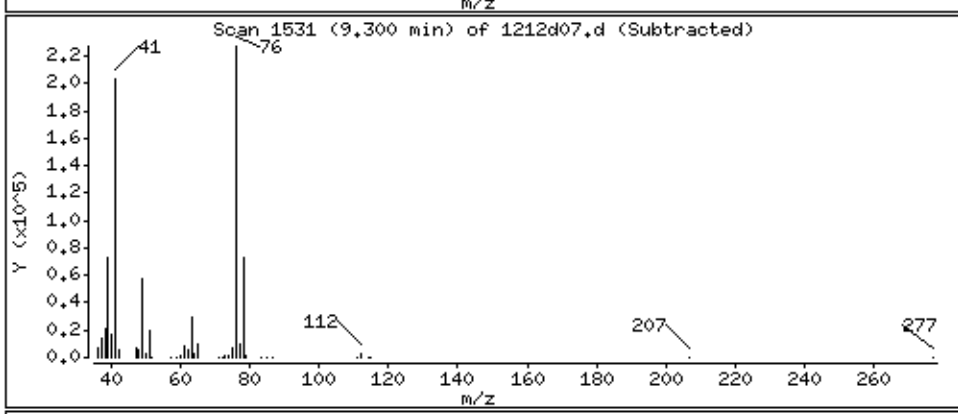
Column diameter: 0.25

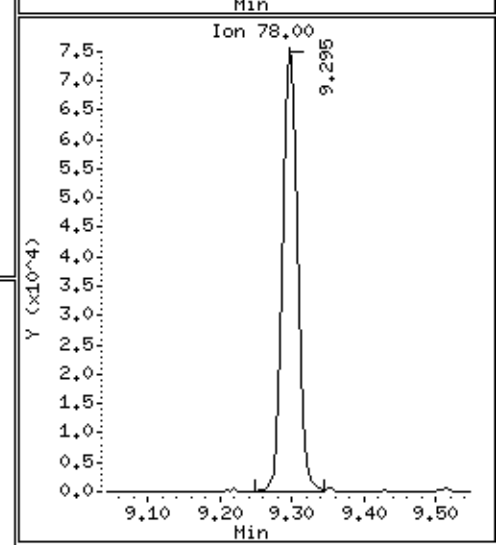
59 1,3-Dichloropropane

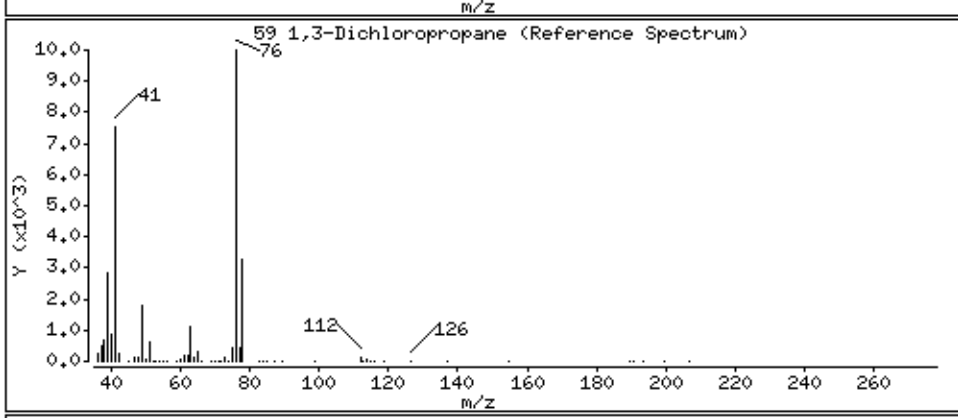
Concentration: 47.7 ug/L

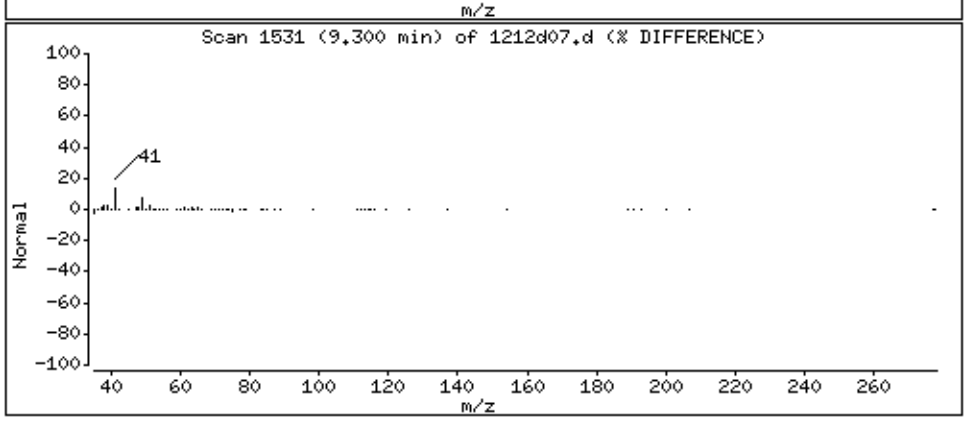












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

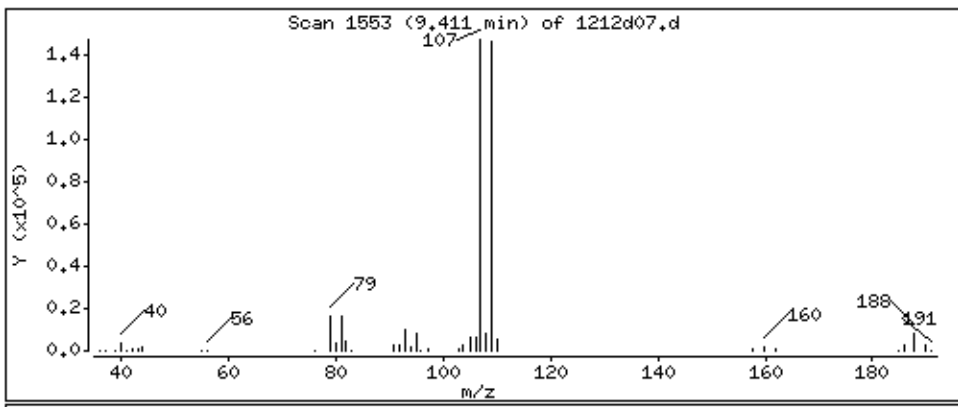
Operator: GEM

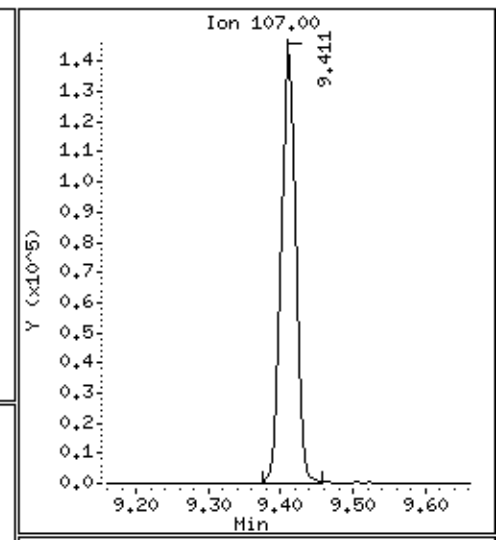
Column phase: RTX VMS 30m

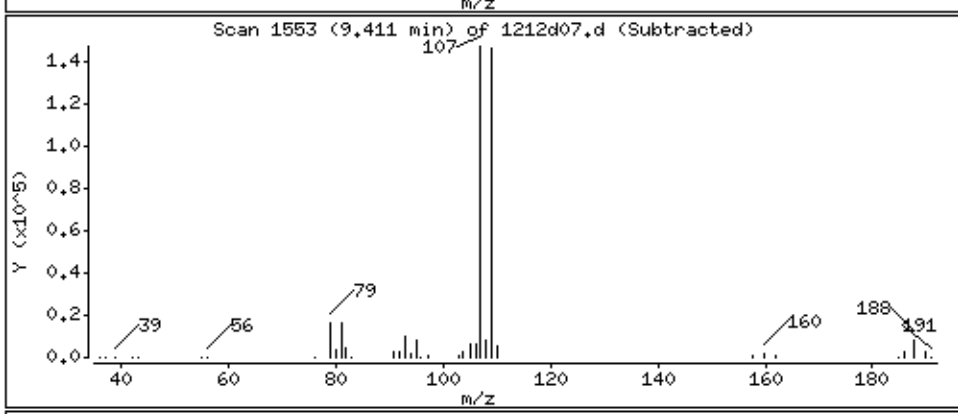
Column diameter: 0.25

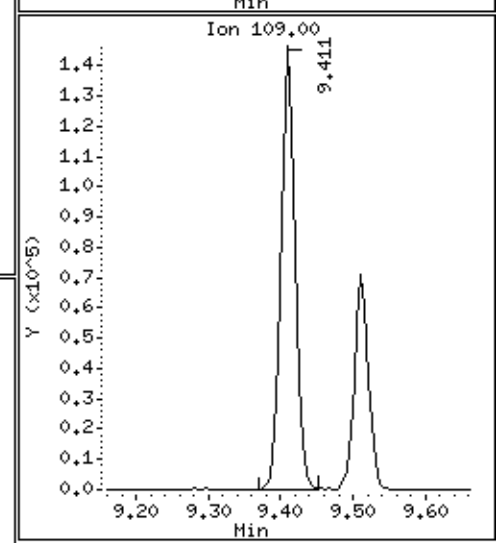
60 1,2-Dibromoethane (EDB)

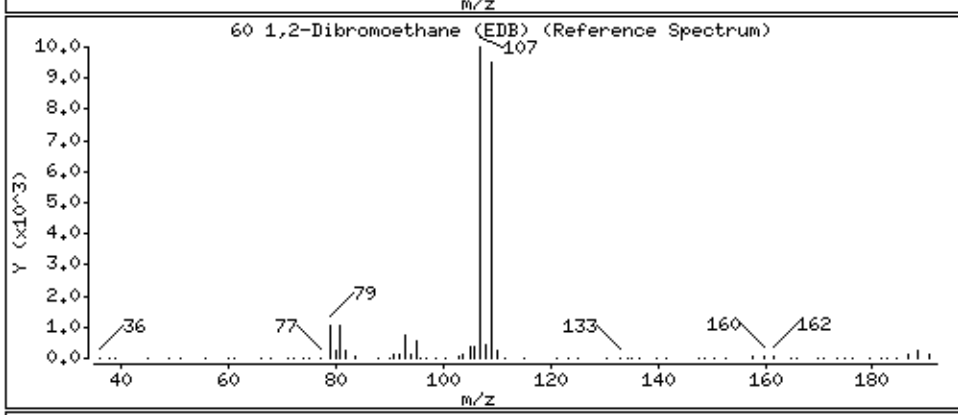
Concentration: 41.9 ug/L

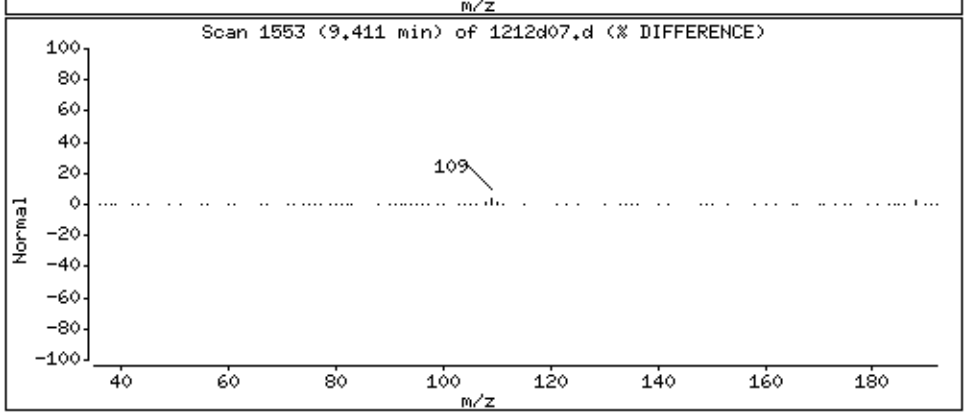












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

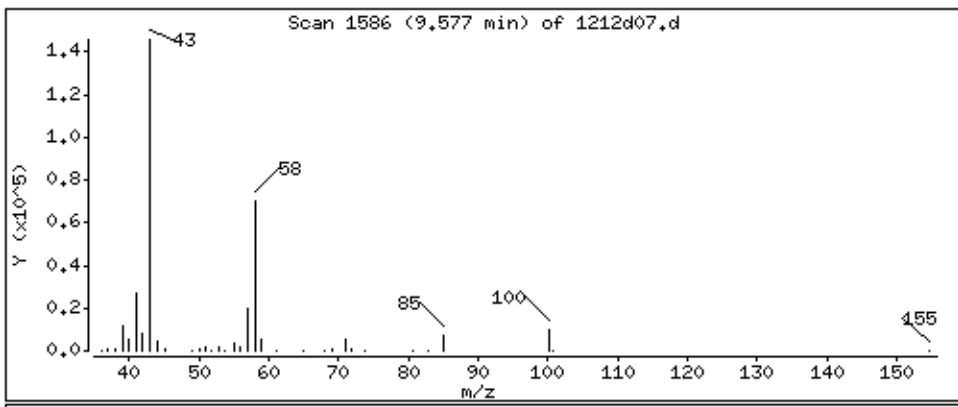
Operator: GEM

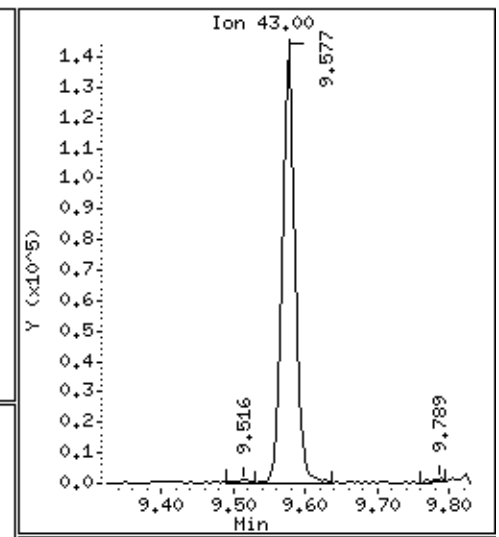
Column phase: RTX VMS 30m

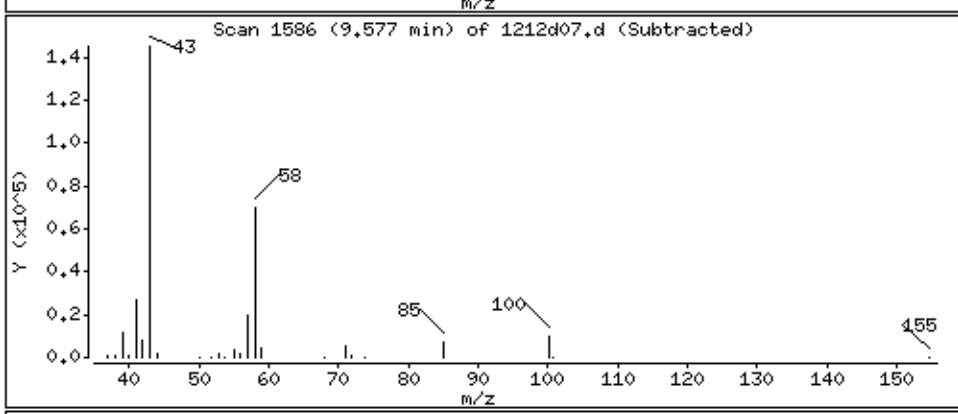
Column diameter: 0.25

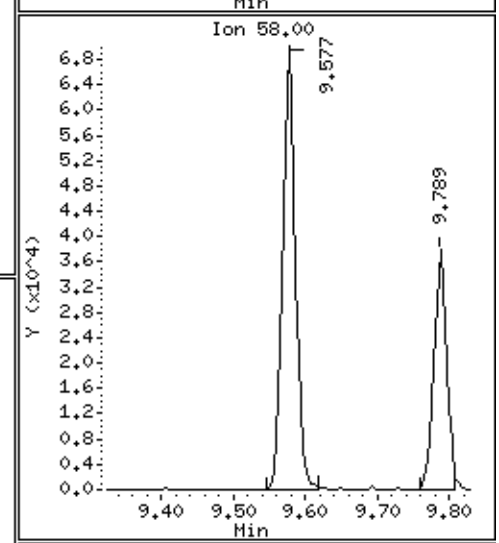
61 2-Hexanone

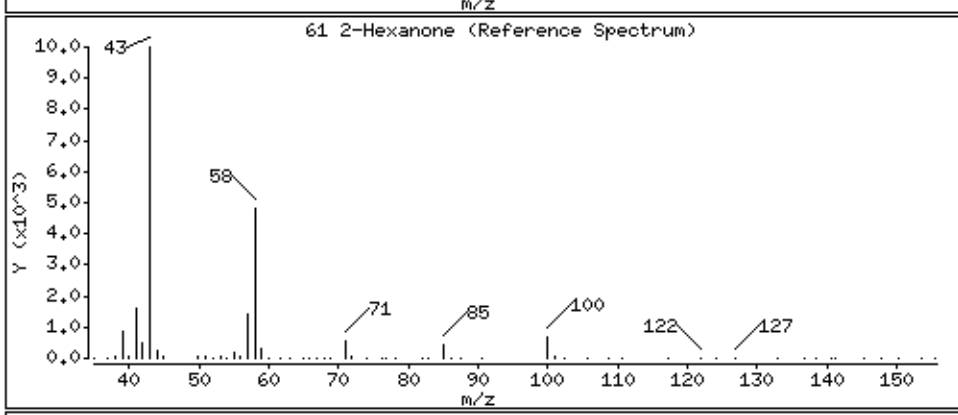
Concentration: 46.5 ug/L

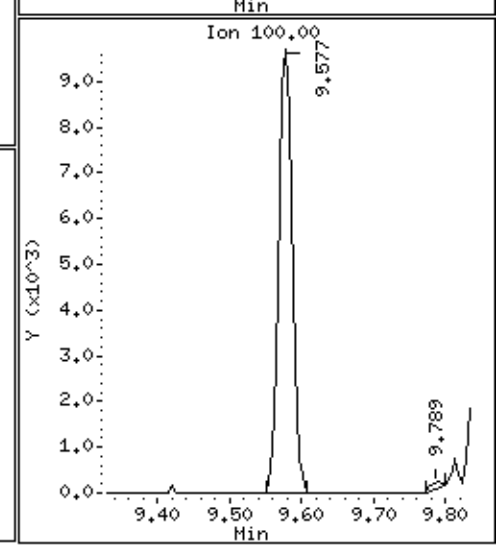


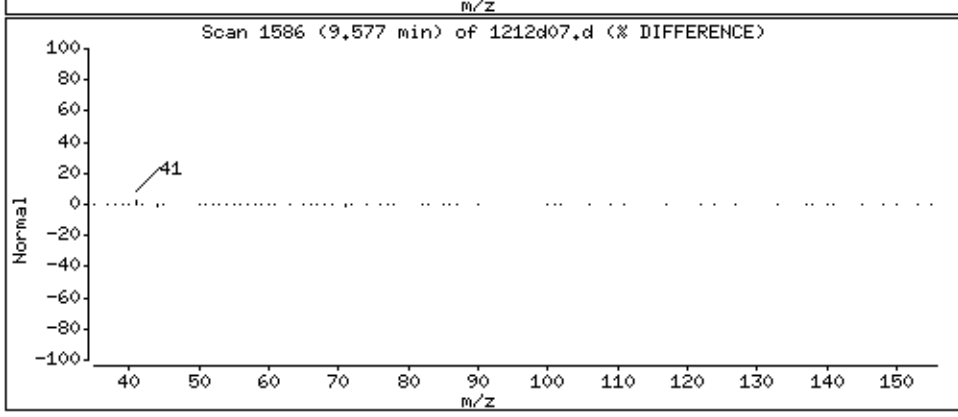












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

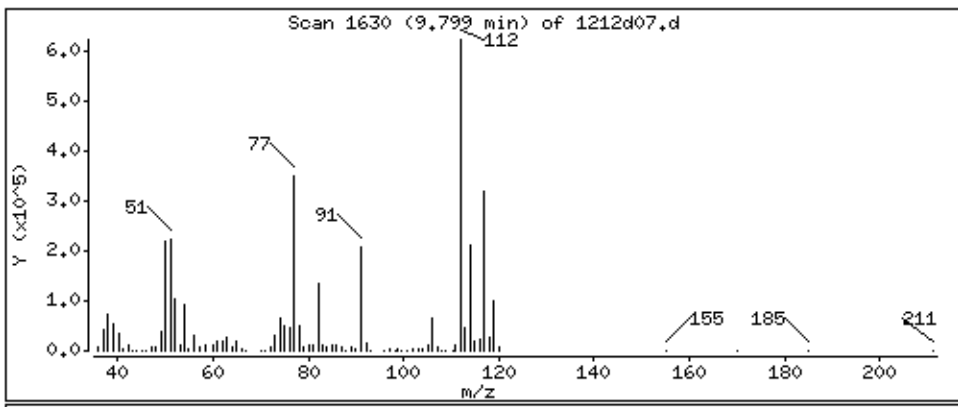
Operator: GEM

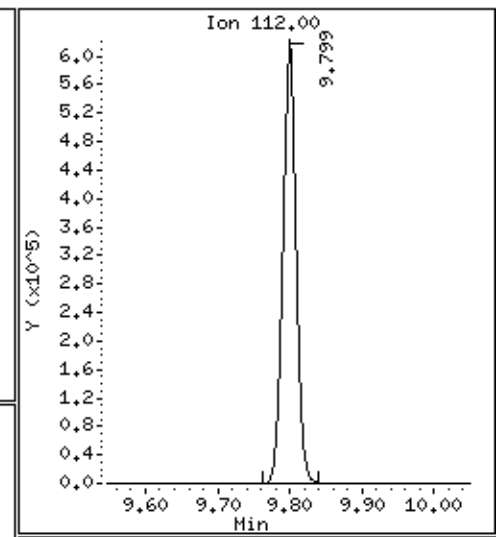
Column phase: RTX VMS 30m

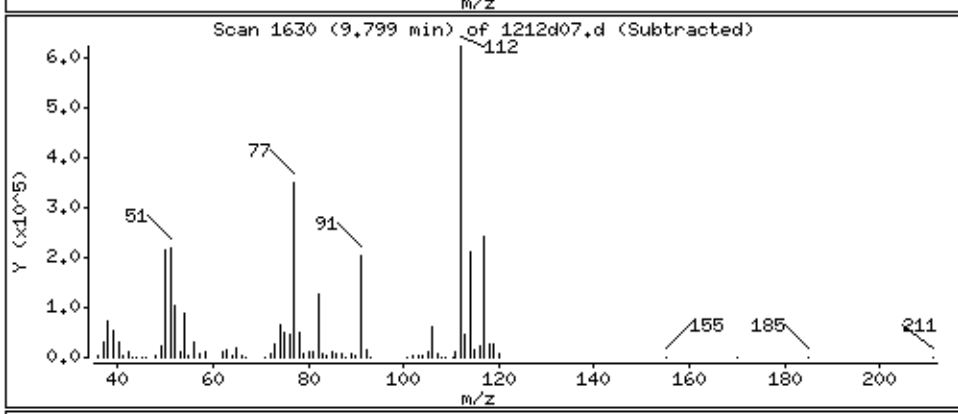
Column diameter: 0.25

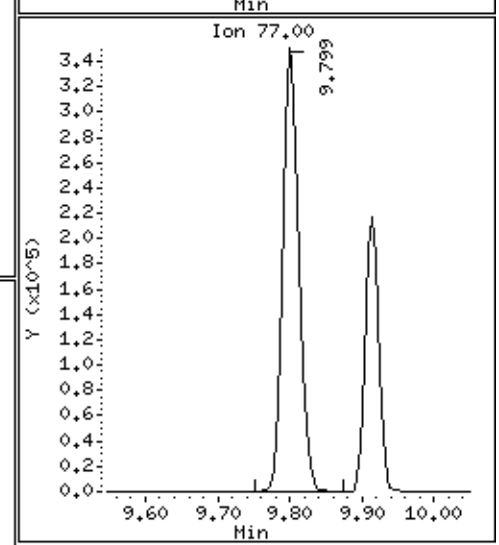
63 Chlorobenzene

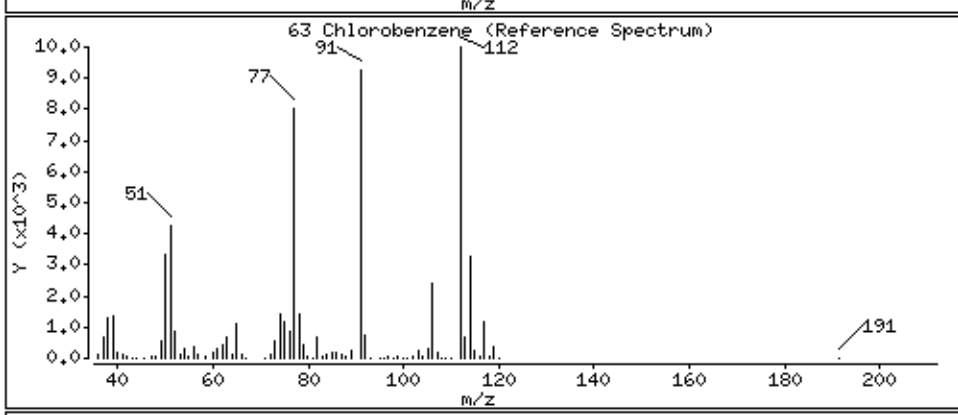
Concentration: 51.2 ug/L

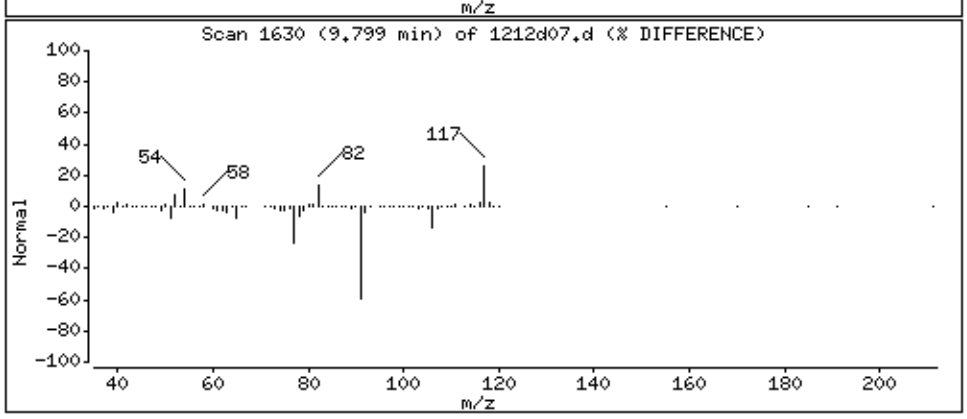












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

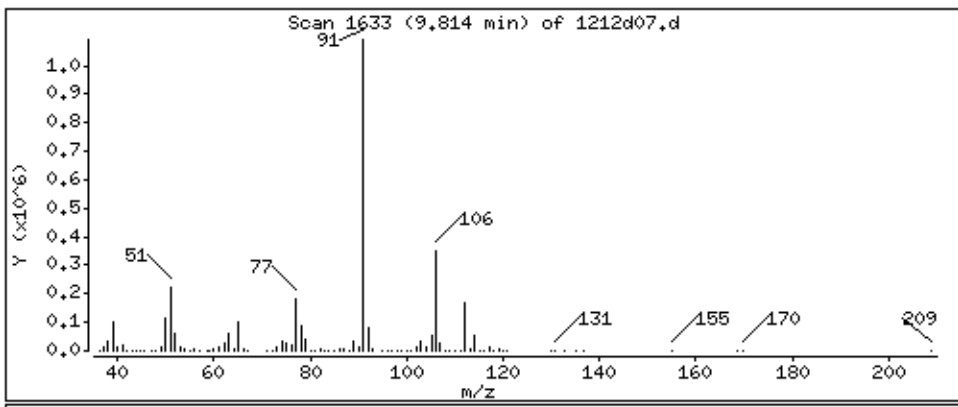
Operator: GEM

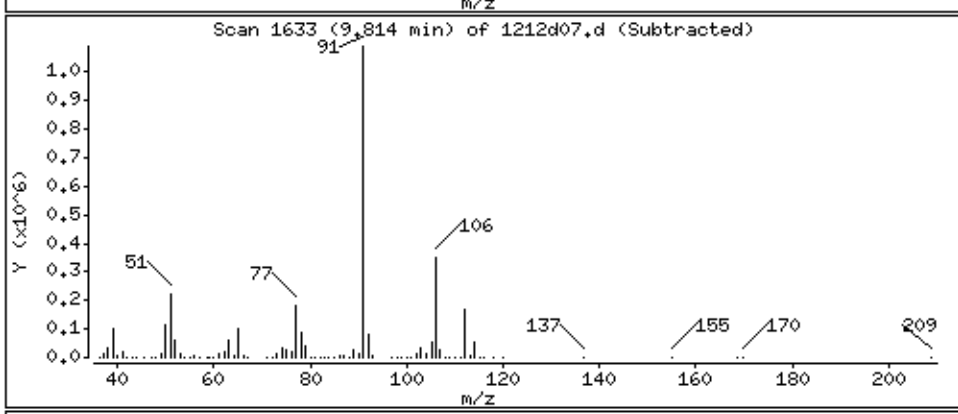
Column phase: RTX VMS 30m

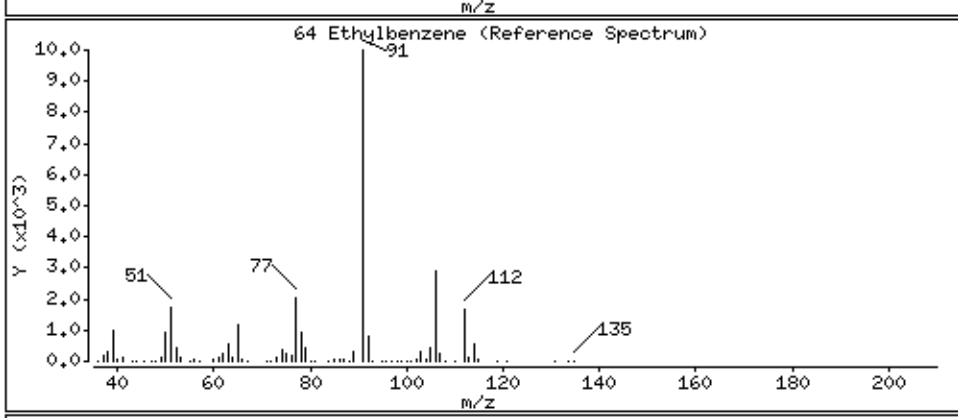
Column diameter: 0.25

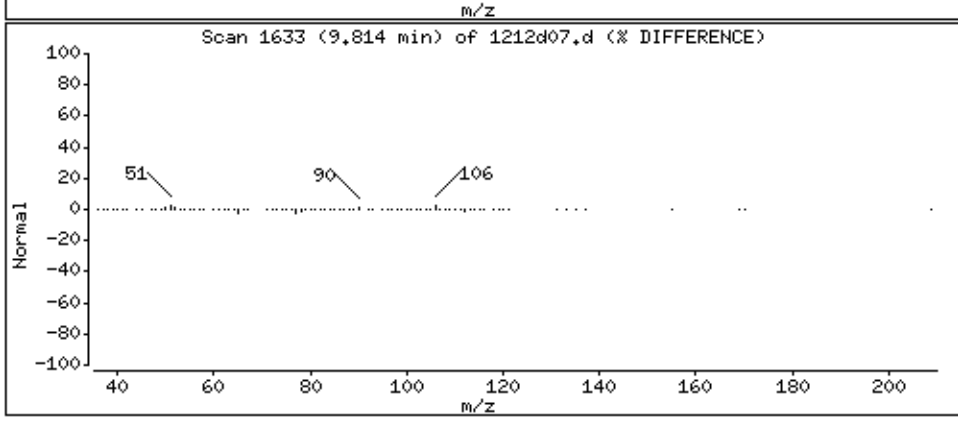
64 Ethylbenzene

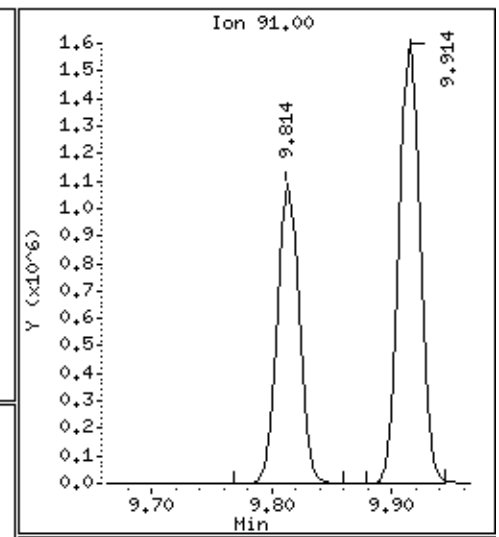
Concentration: 49.6 ug/L

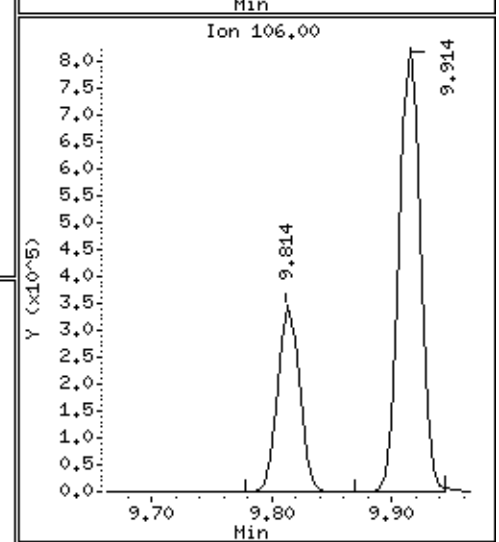


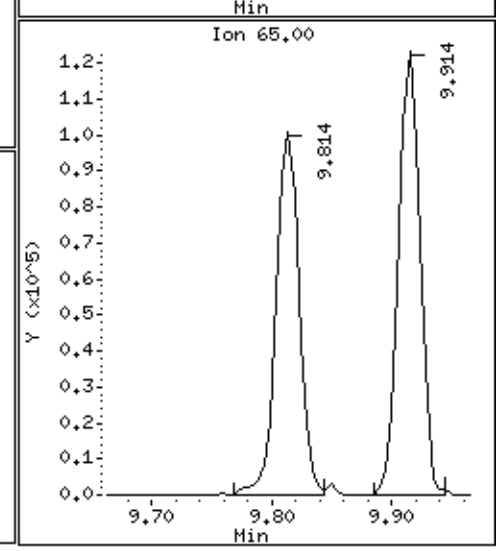












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

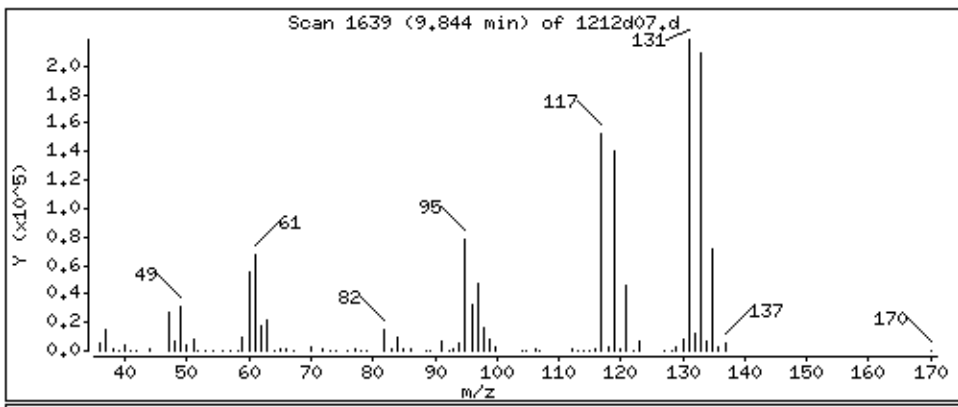
Operator: GEM

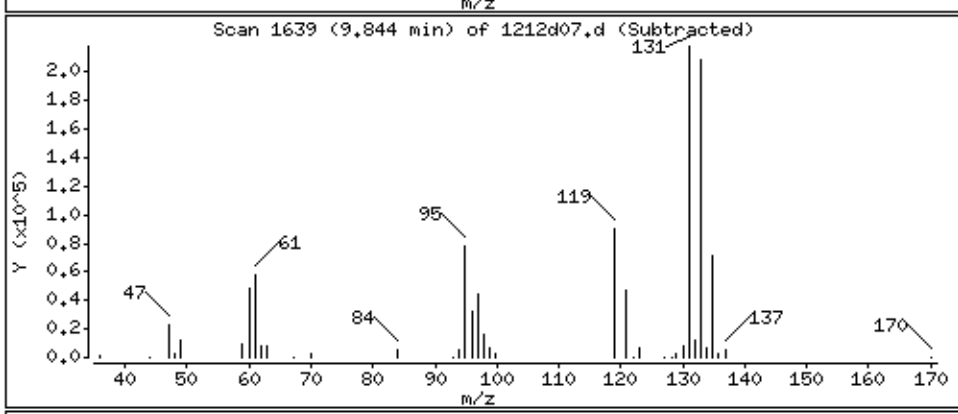
Column phase: RTX VMS 30m

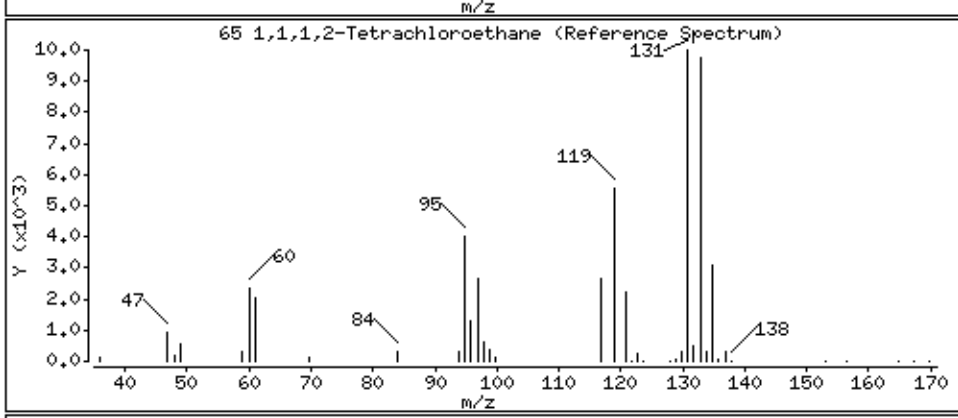
Column diameter: 0.25

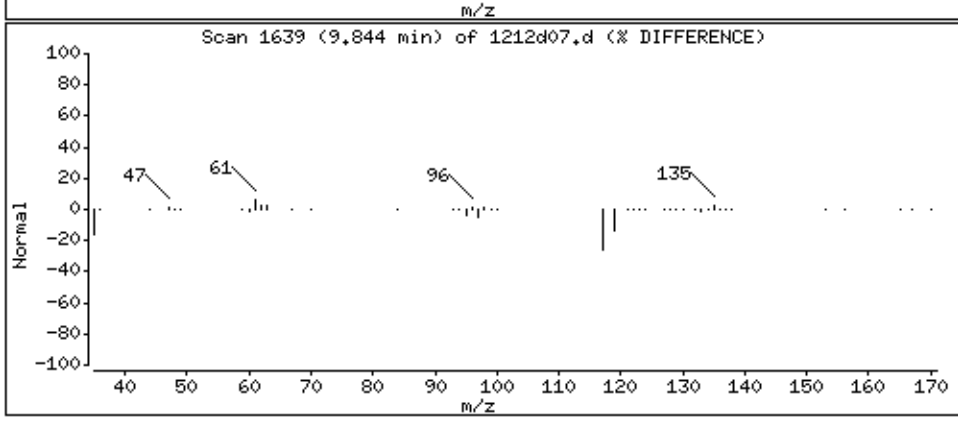
65 1,1,1,2-Tetrachloroethane

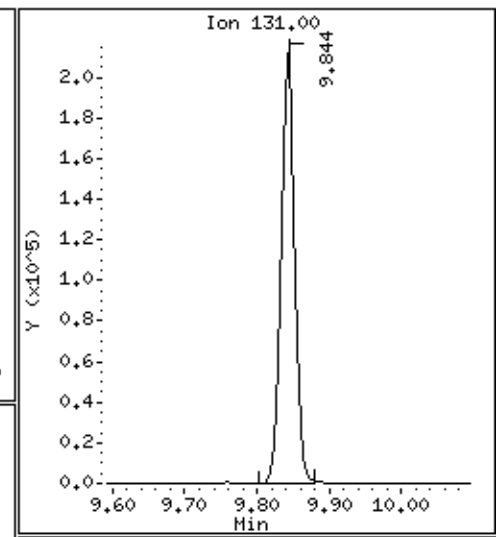
Concentration: 49.4 ug/L

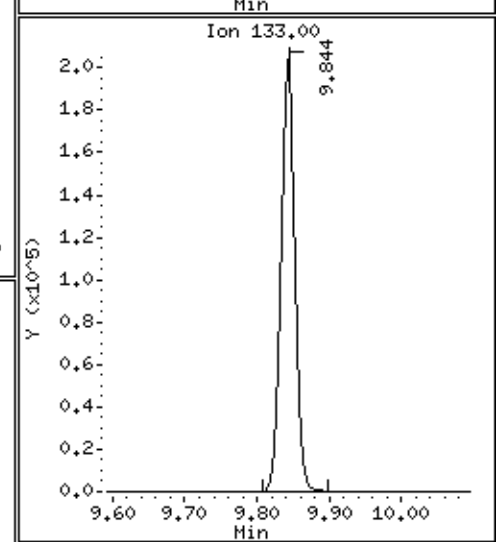


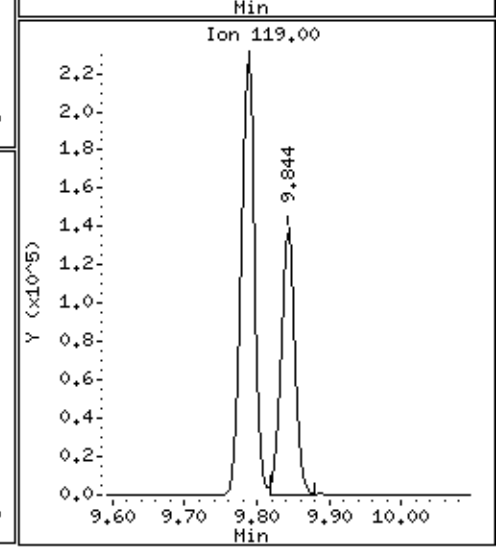












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

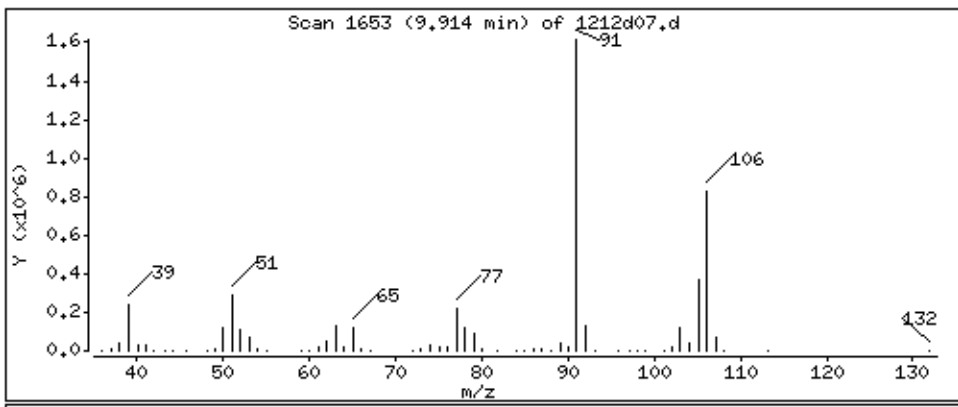
Operator: GEM

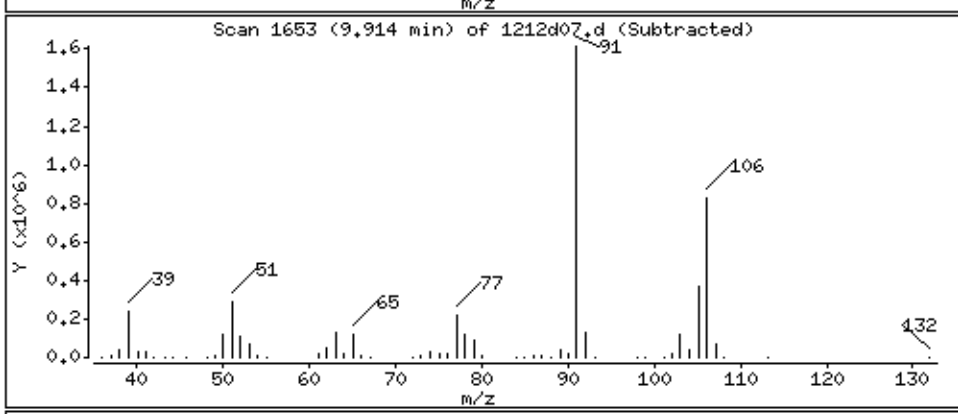
Column phase: RTX VMS 30m

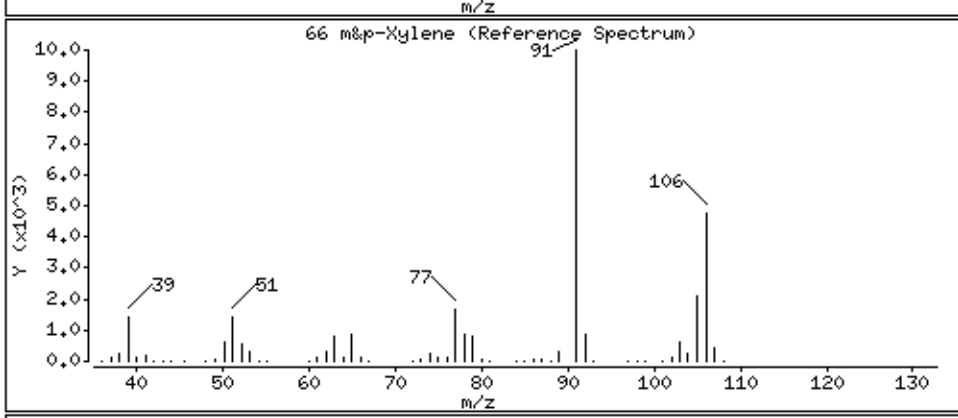
Column diameter: 0.25

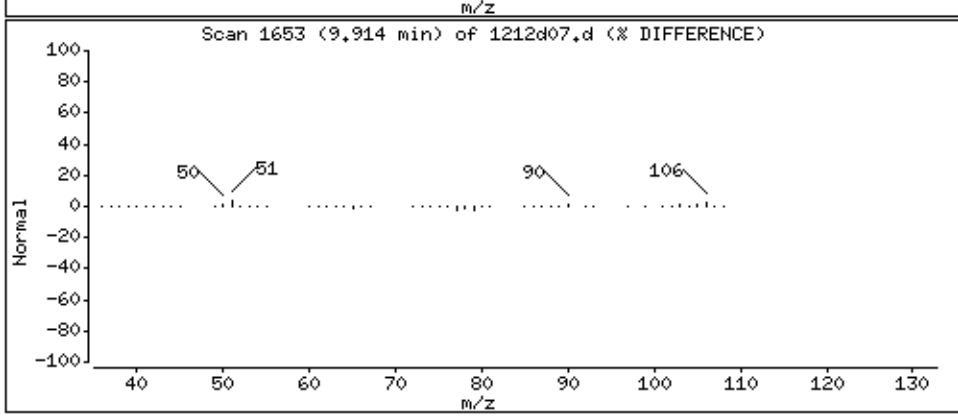
66 m&p-Xylene

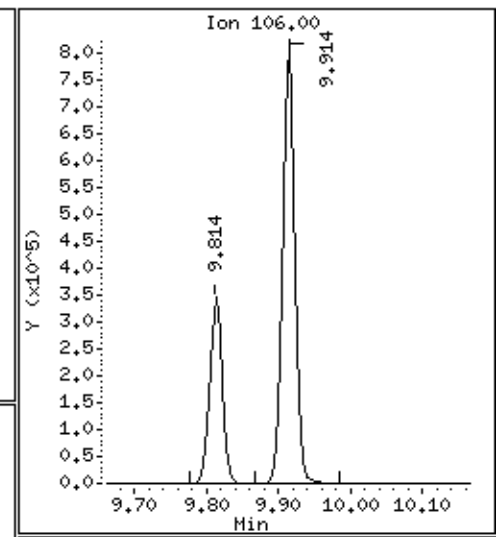
Concentration: 95.4 ug/L

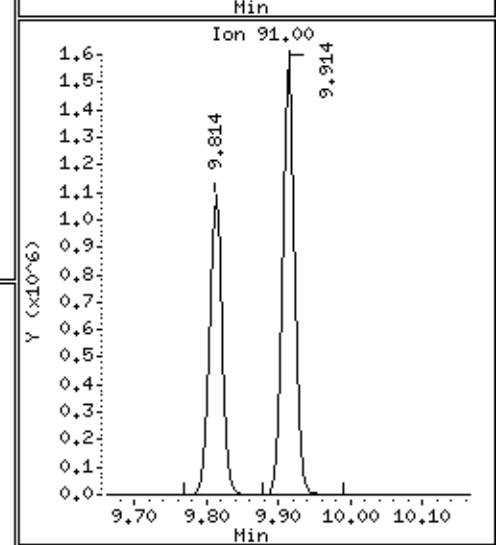


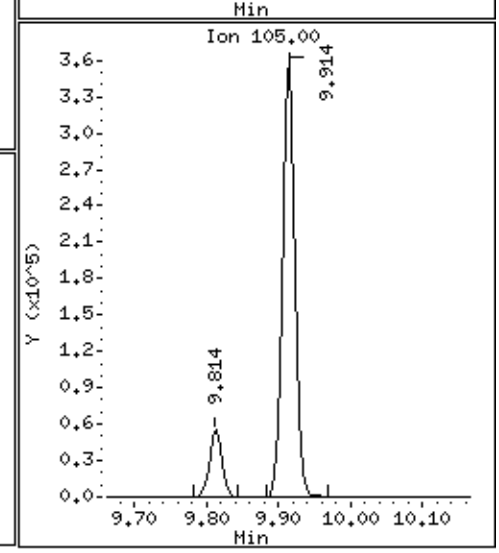












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

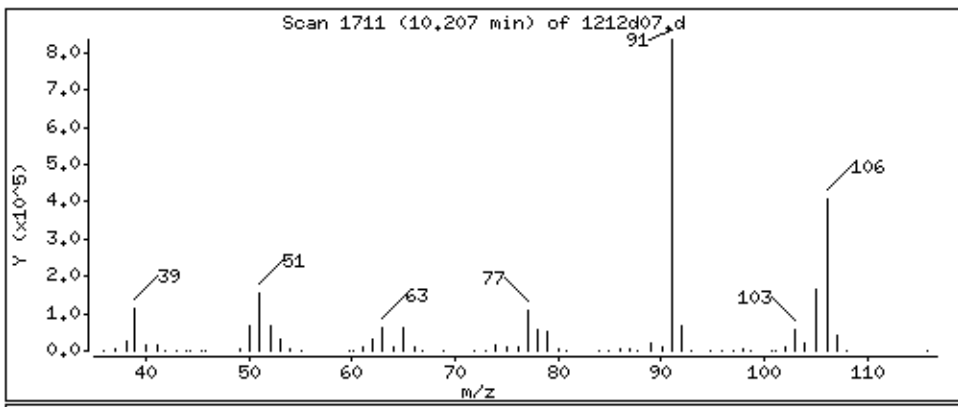
Operator: GEM

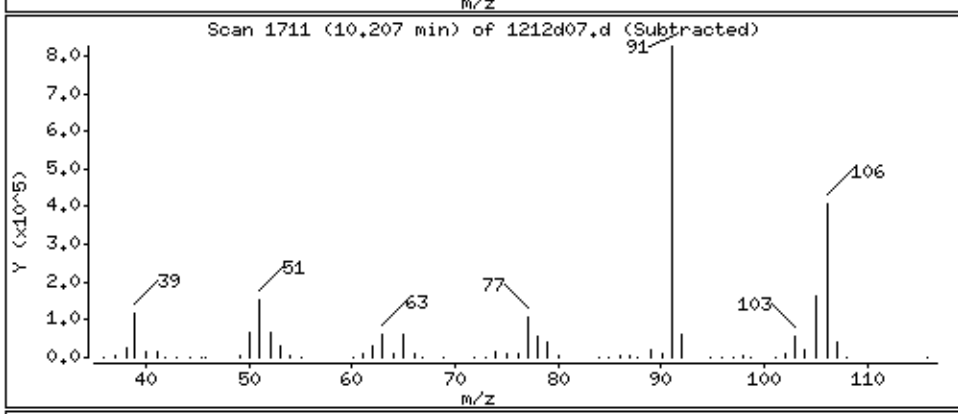
Column phase: RTX VMS 30m

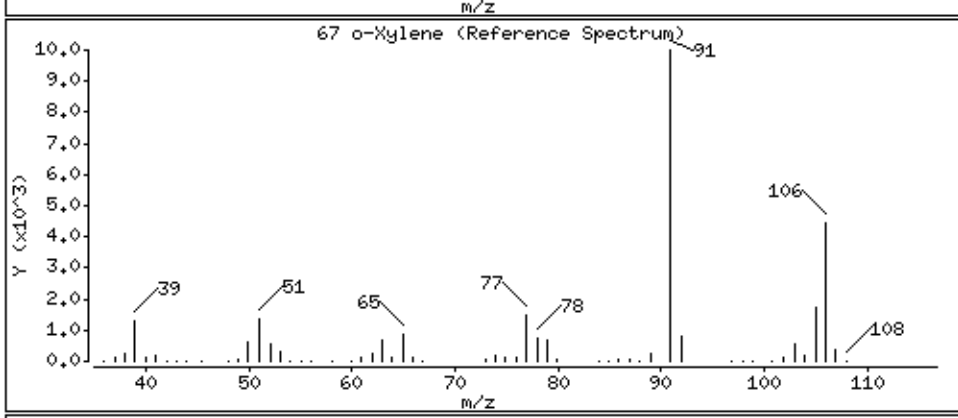
Column diameter: 0.25

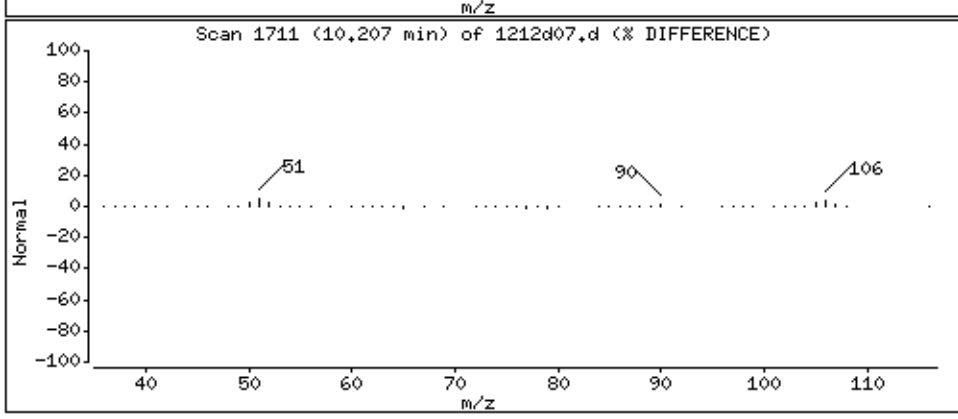
67 o-Xylene

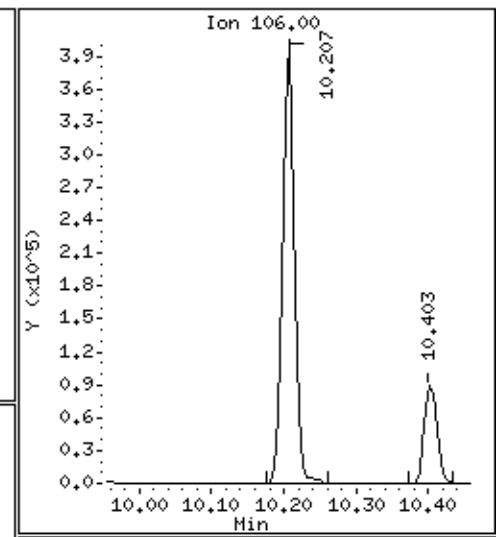
Concentration: 49.4 ug/L

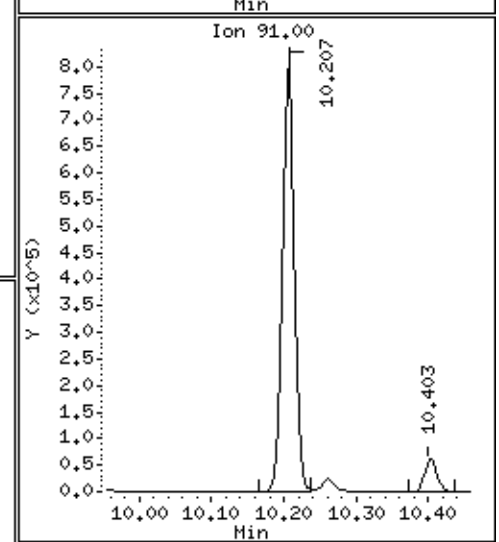


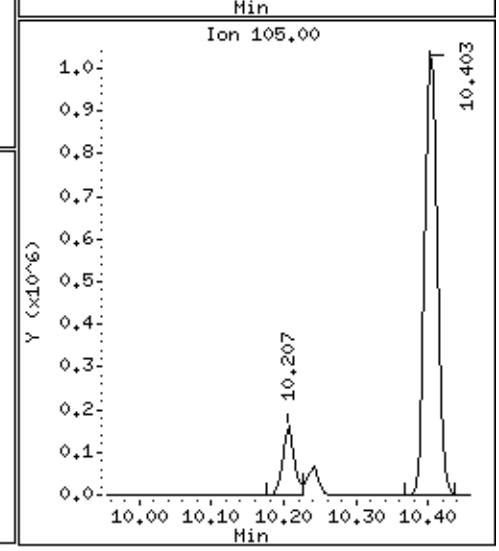












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

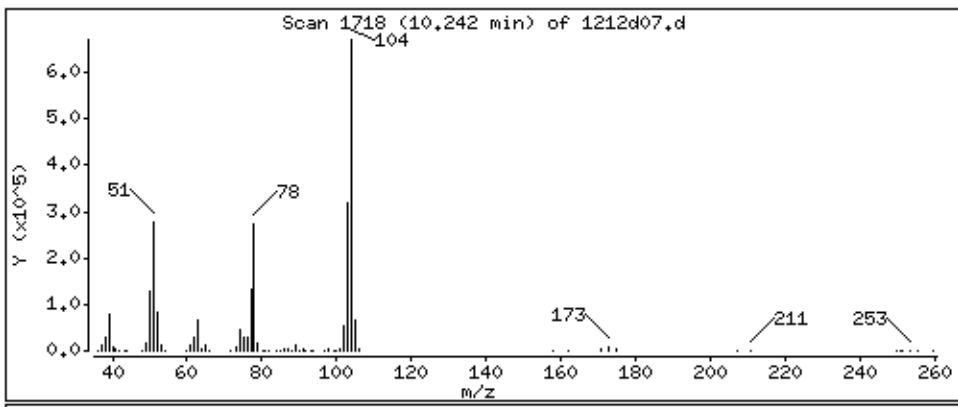
Operator: GEM

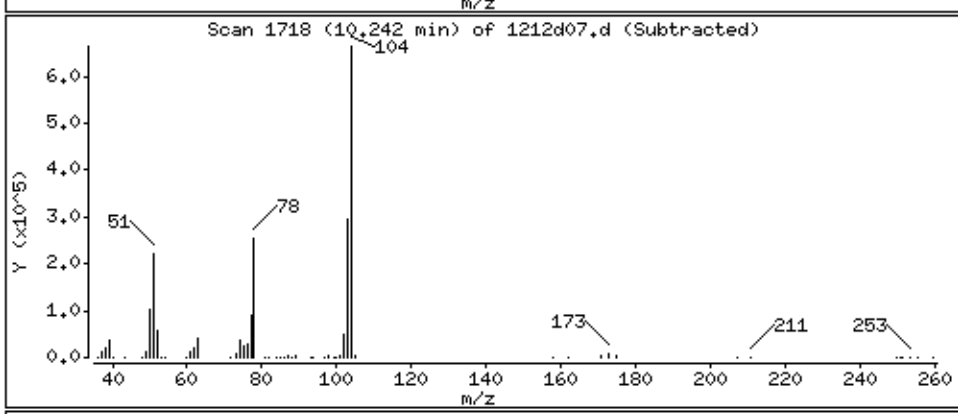
Column phase: RTX VMS 30m

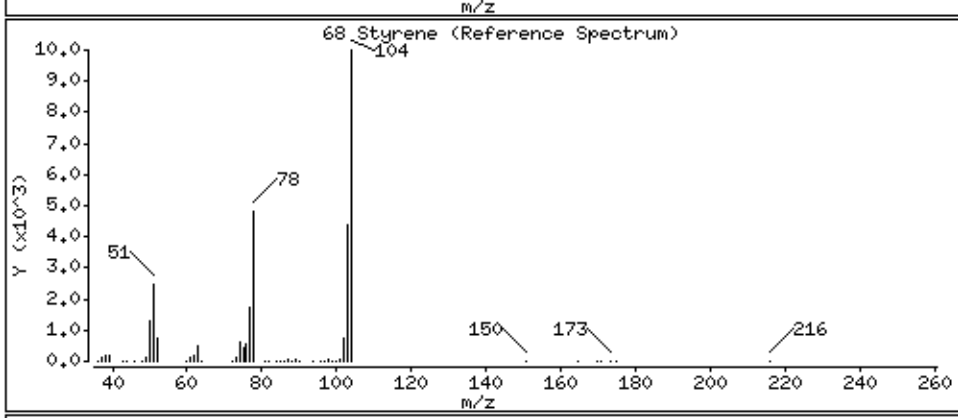
Column diameter: 0.25

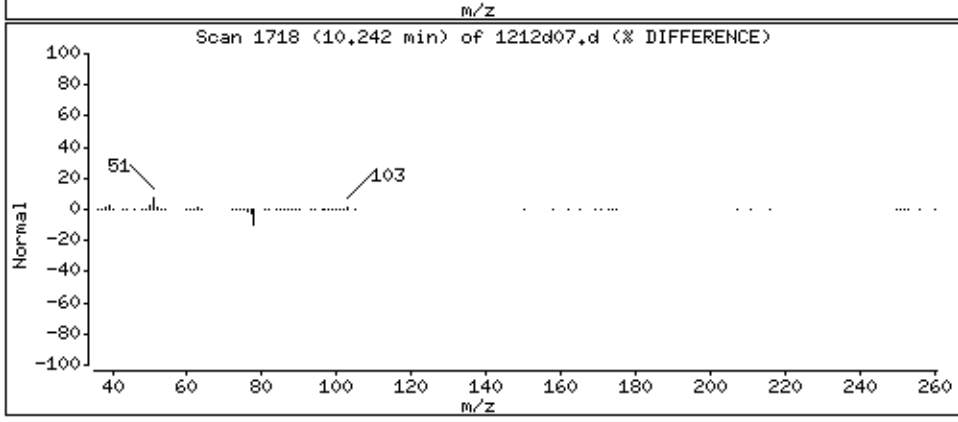
68 Styrene

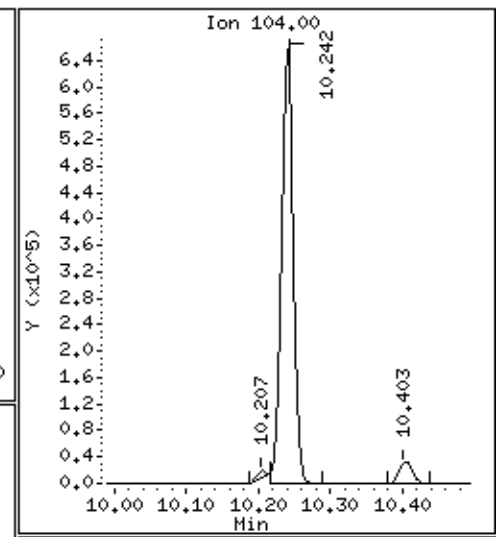
Concentration: 49.9 ug/L

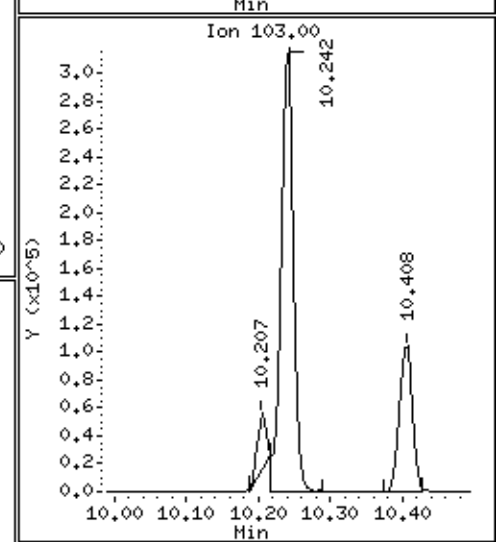


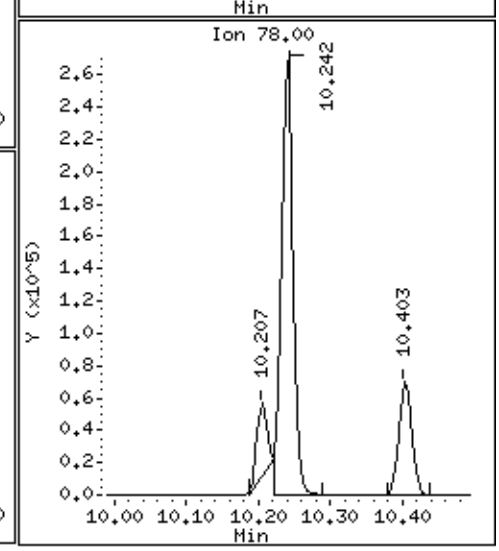












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

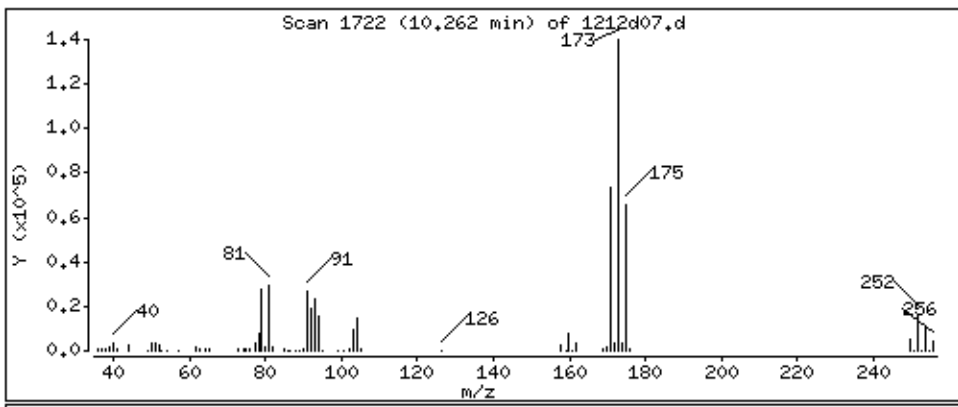
Operator: GEM

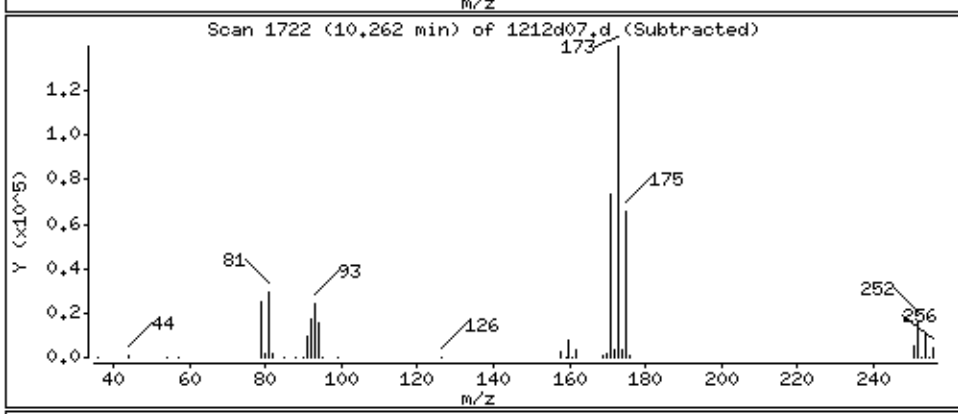
Column phase: RTX VMS 30m

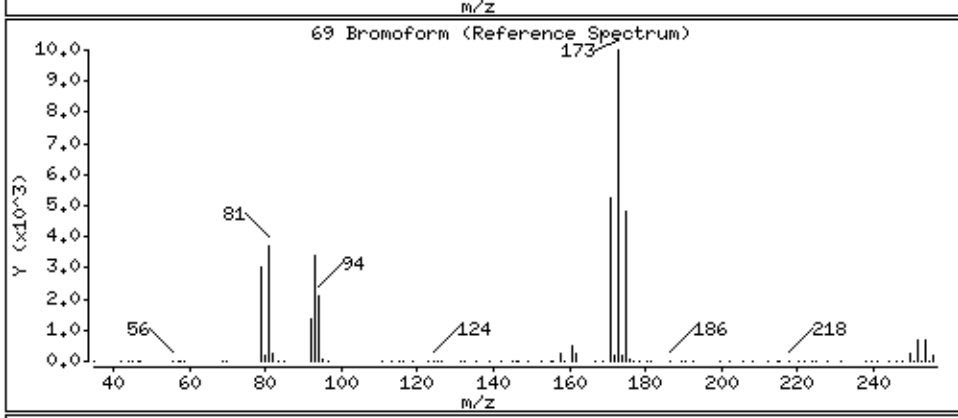
Column diameter: 0.25

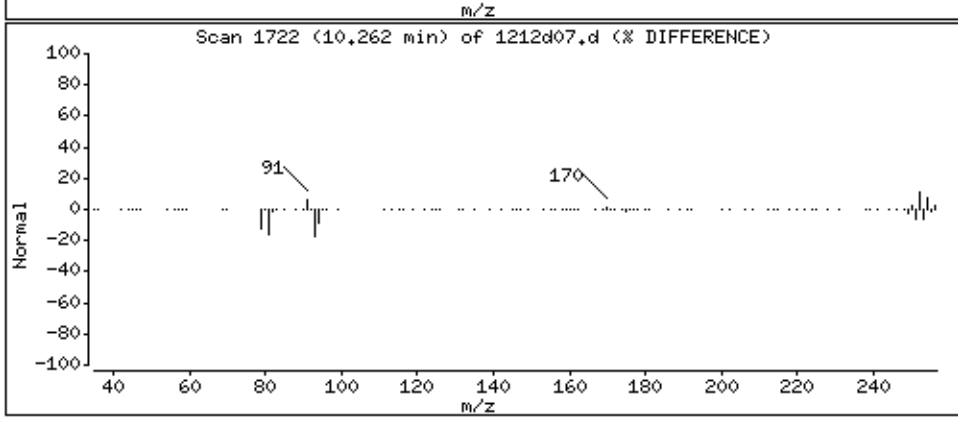
69 Bromoform

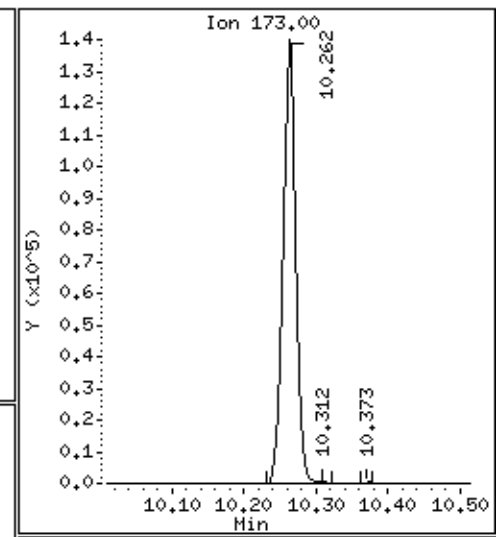
Concentration: 42.6 ug/L

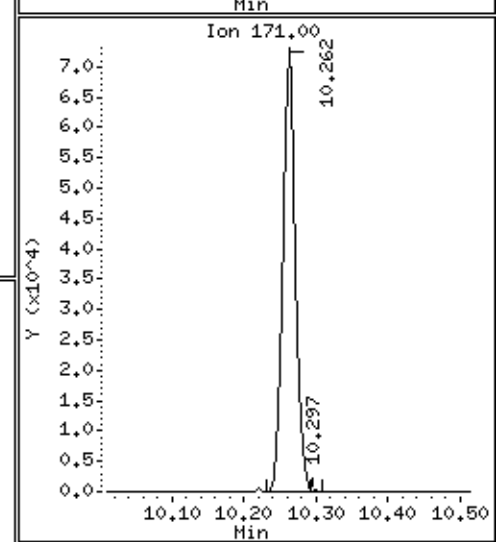


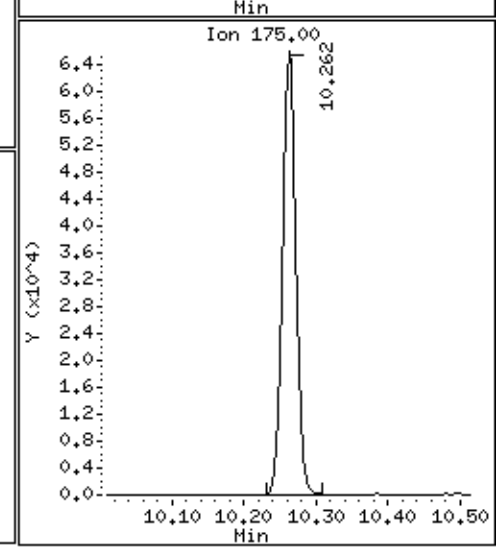












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

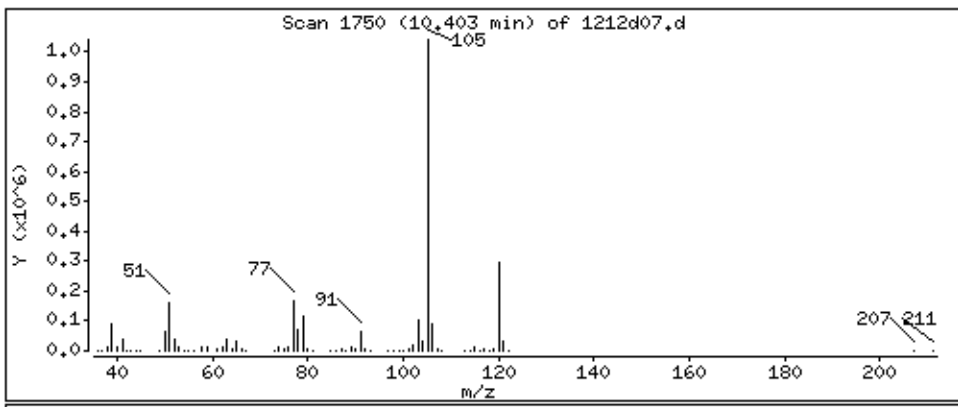
Operator: GEM

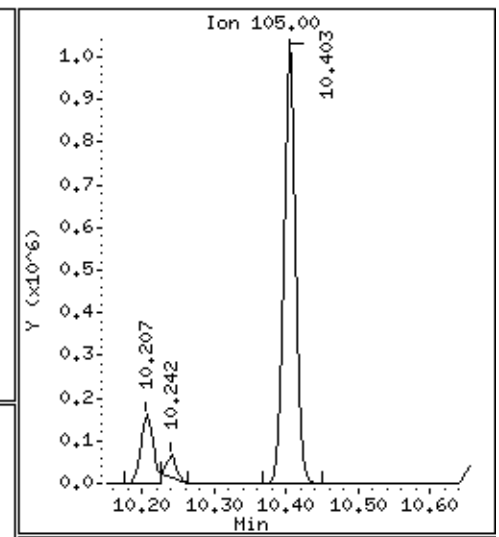
Column phase: RTX VMS 30m

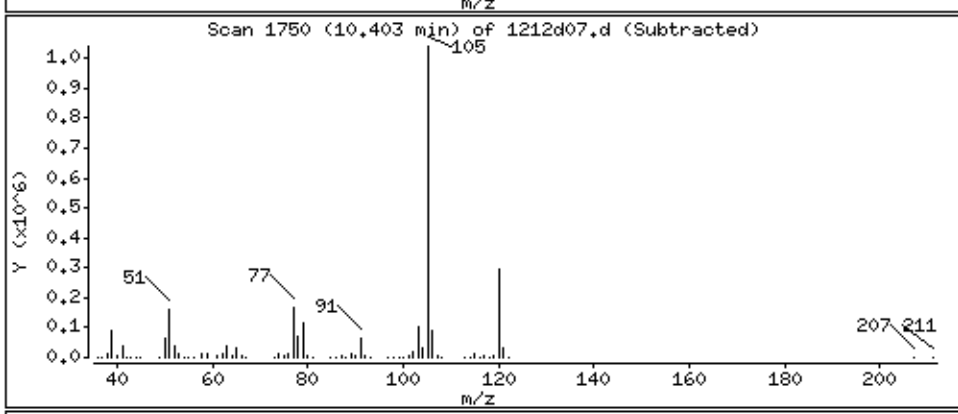
Column diameter: 0.25

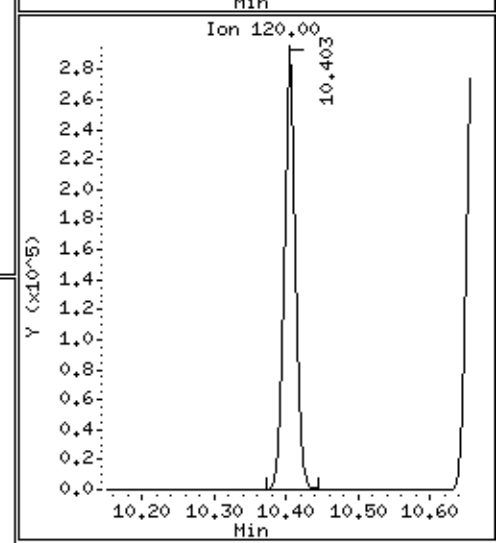
70 Isopropylbenzene (Cumene)

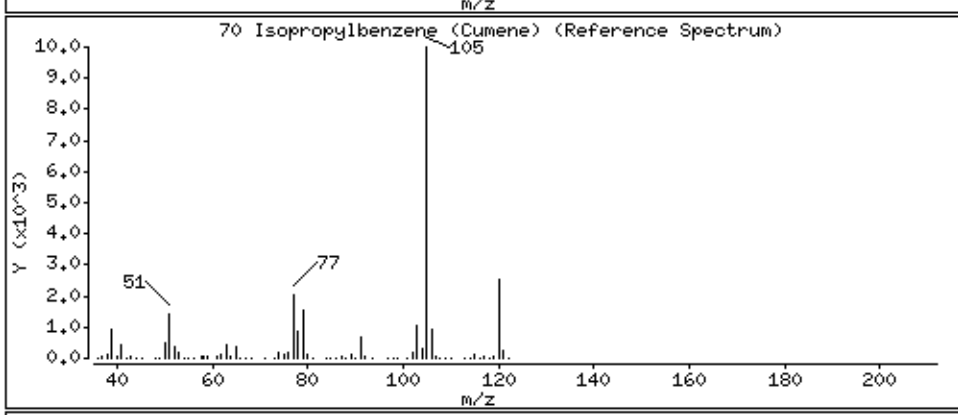
Concentration: 49.4 ug/L

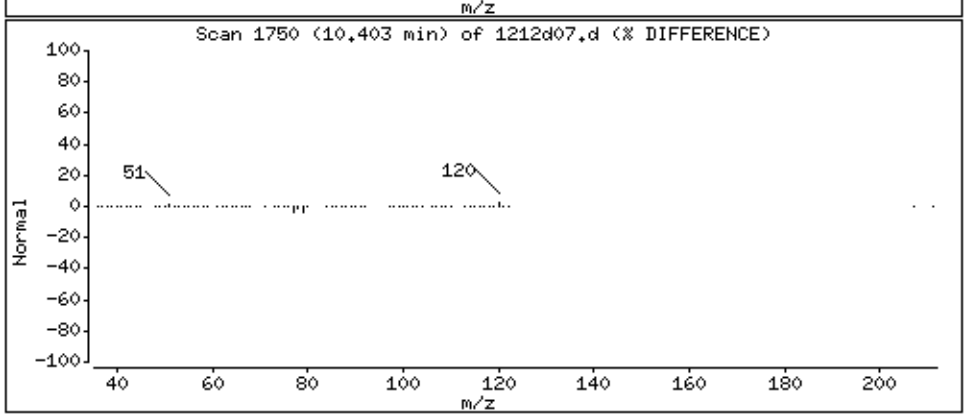












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

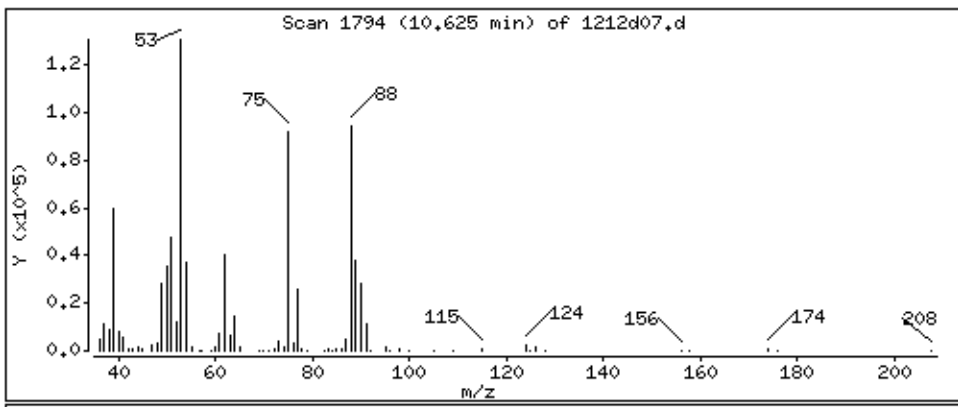
Operator: GEM

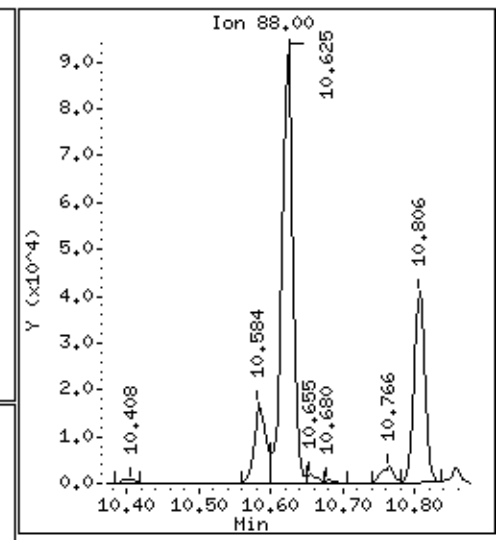
Column phase: RTX VMS 30m

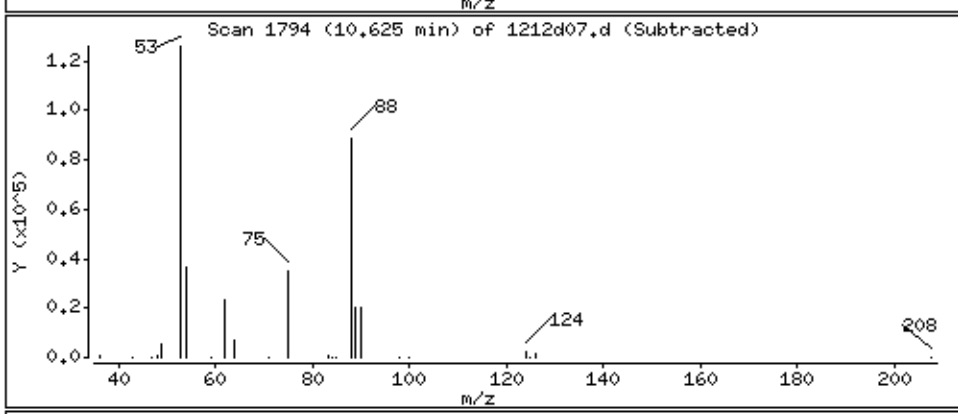
Column diameter: 0.25

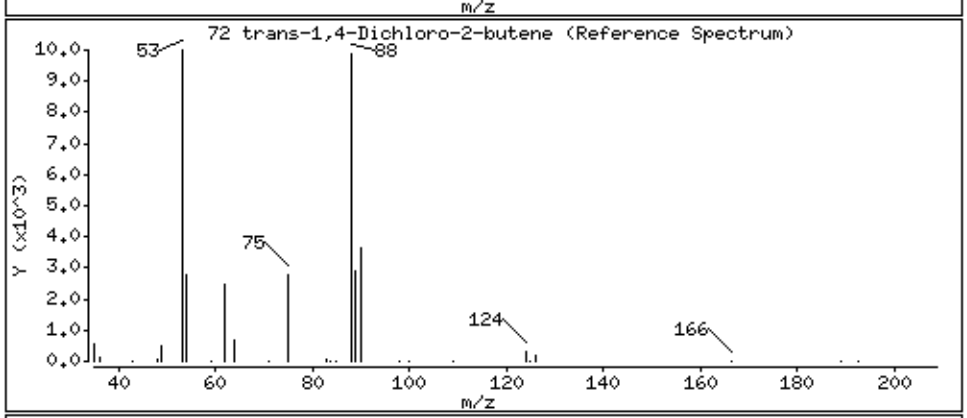
72 trans-1,4-Dichloro-2-butene

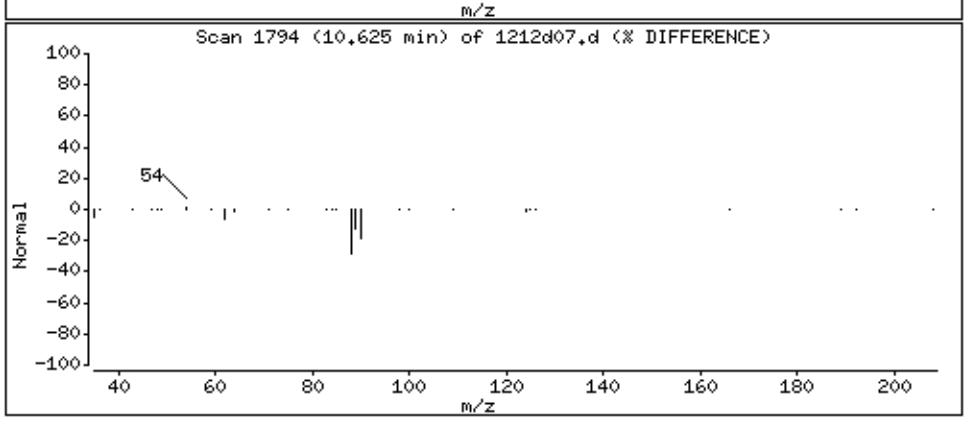
Concentration: 70.9 ug/L











Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

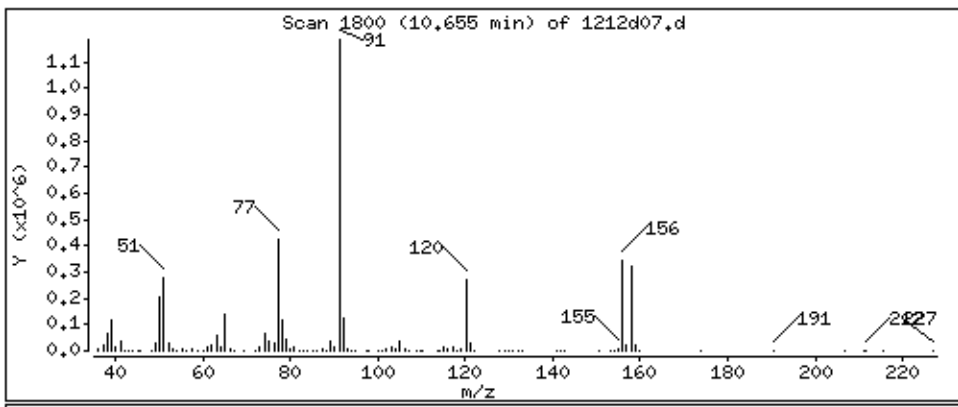
Operator: GEM

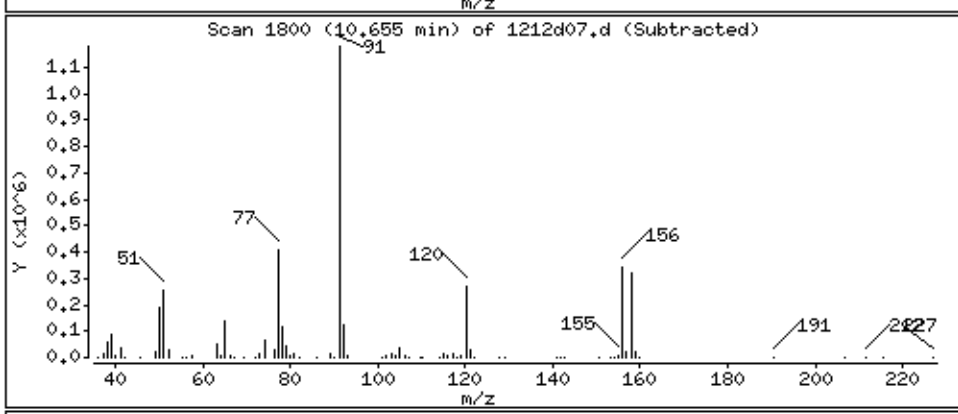
Column phase: RTX VMS 30m

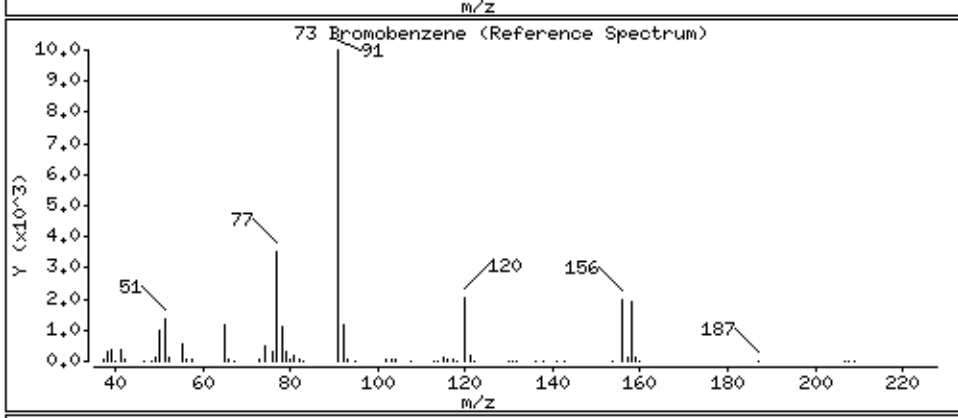
Column diameter: 0.25

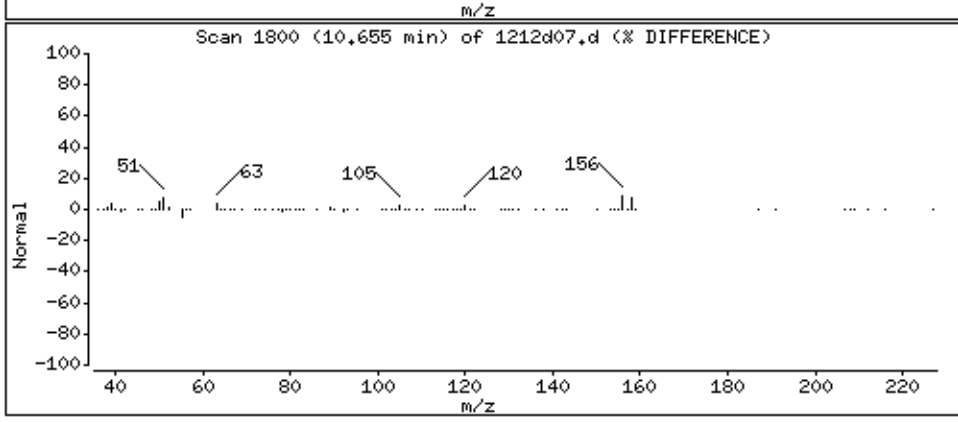
73 Bromobenzene

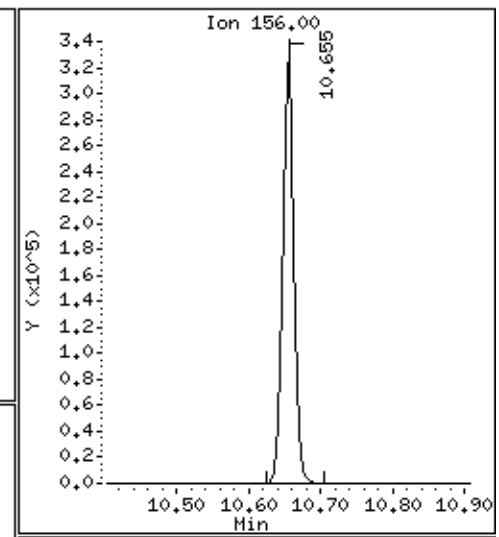
Concentration: 53.3 ug/L

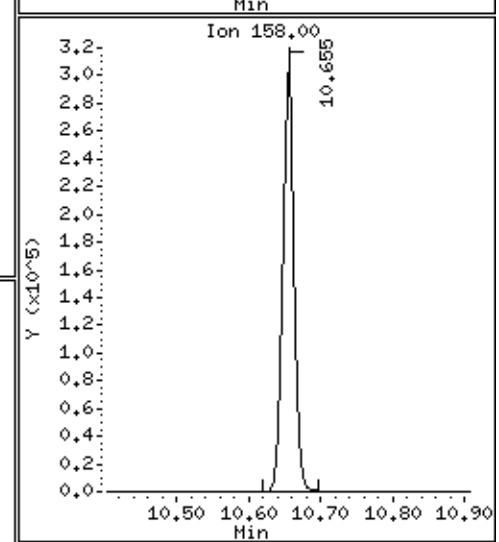


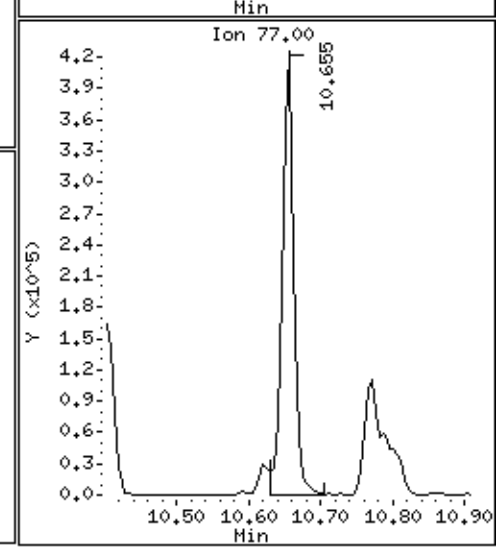












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

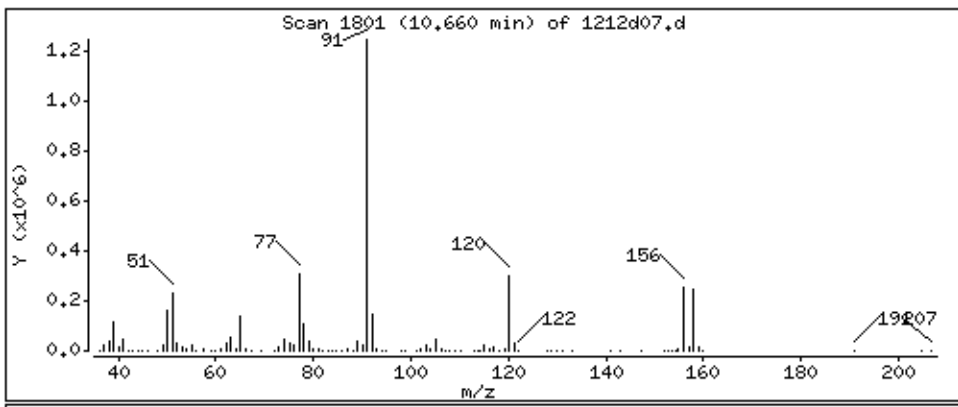
Operator: GEM

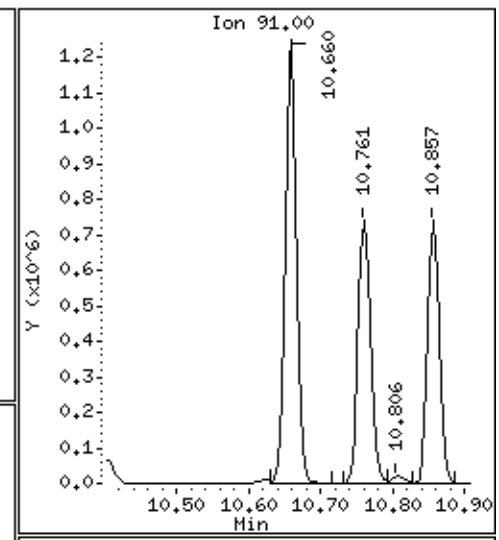
Column phase: RTX VMS 30m

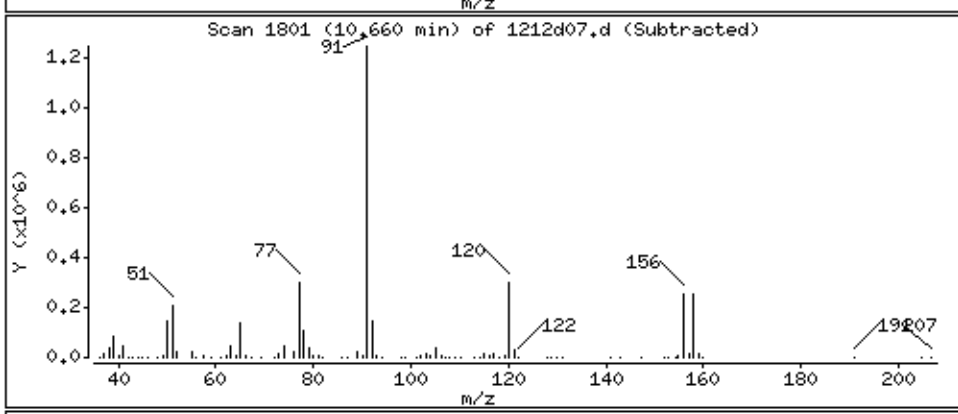
Column diameter: 0.25

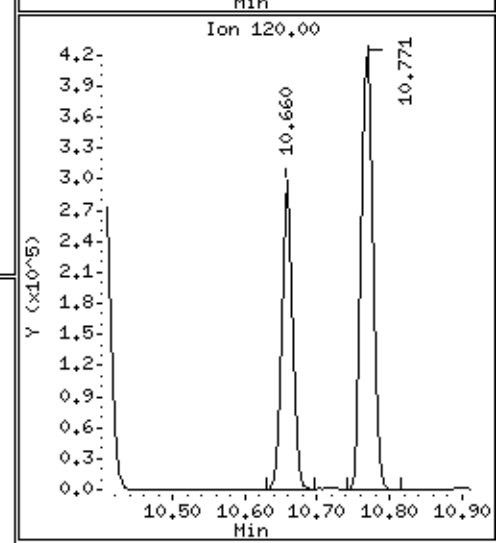
74 n-Propylbenzene

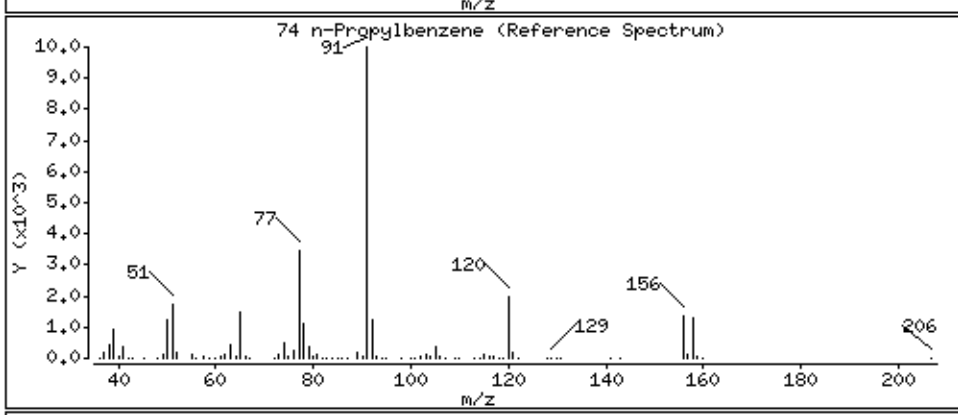
Concentration: 49.2 ug/L

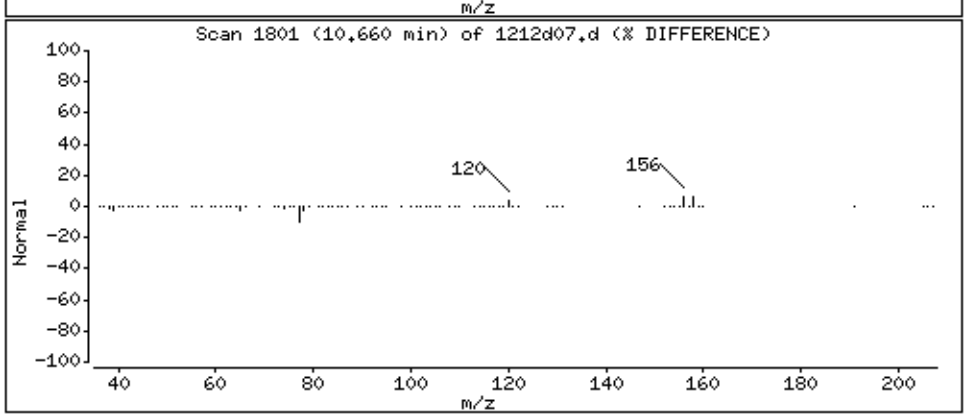












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

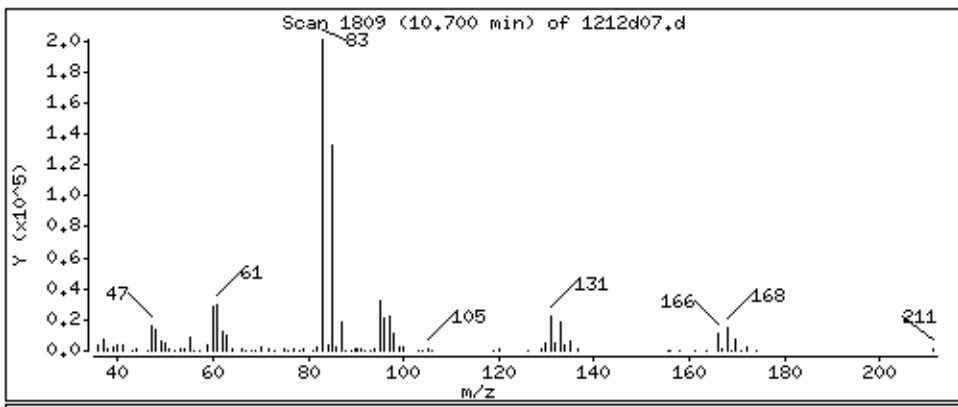
Operator: GEM

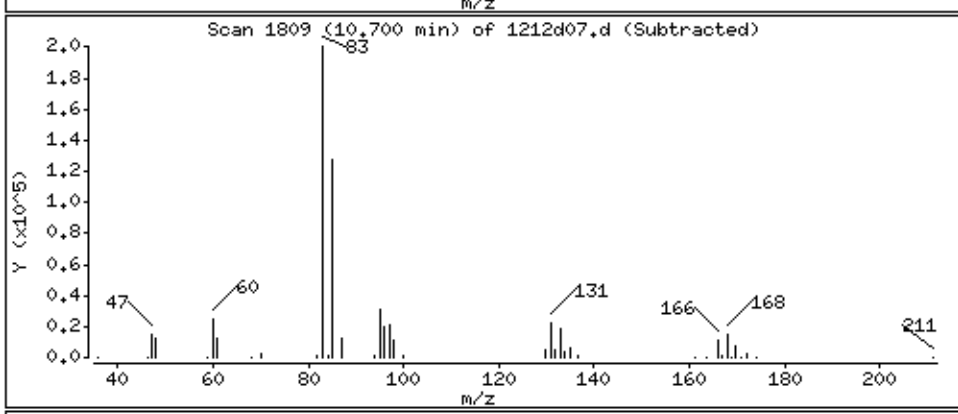
Column phase: RTX VMS 30m

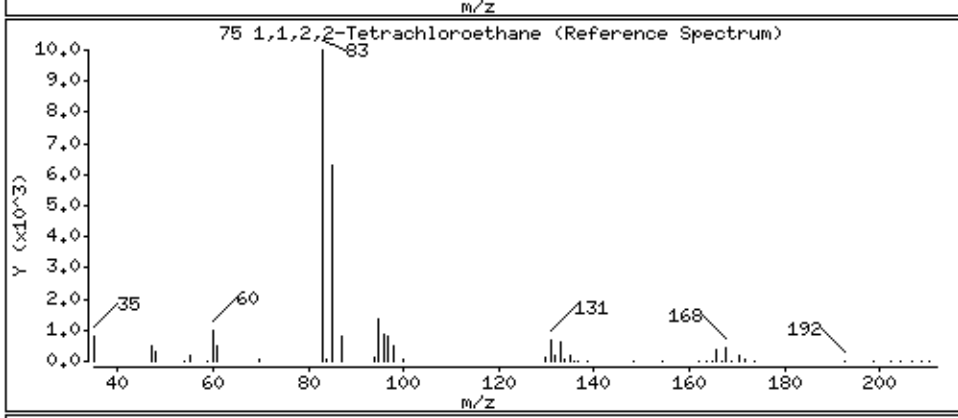
Column diameter: 0.25

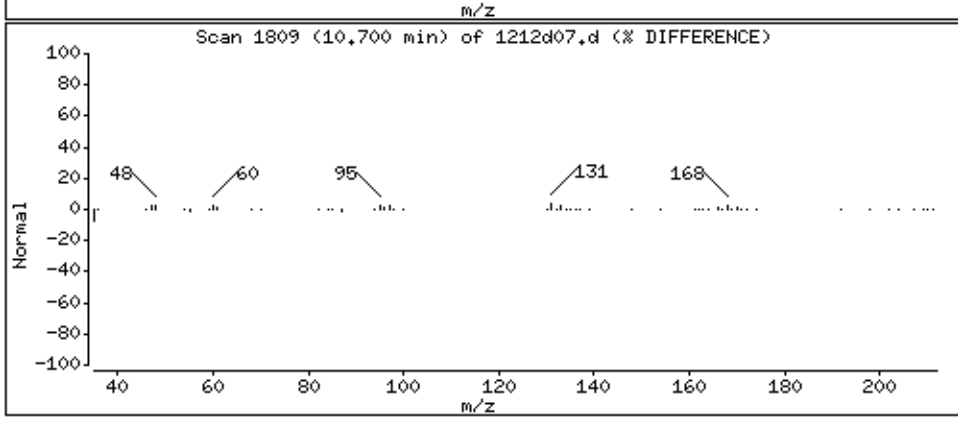
75 1,1,2,2-Tetrachloroethane

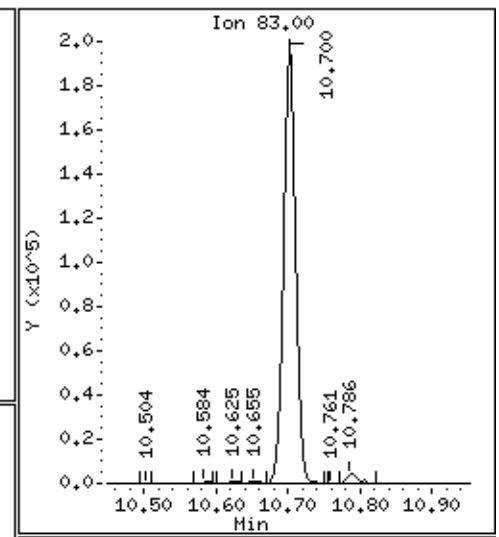
Concentration: 47.4 ug/L

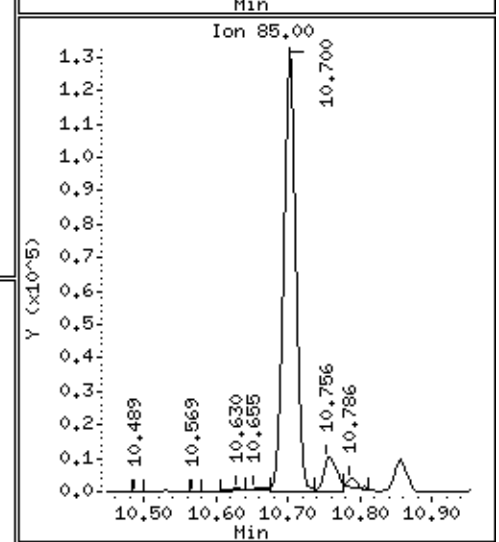


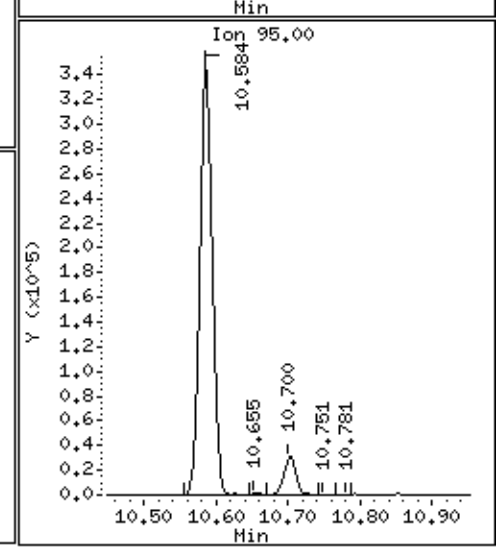












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

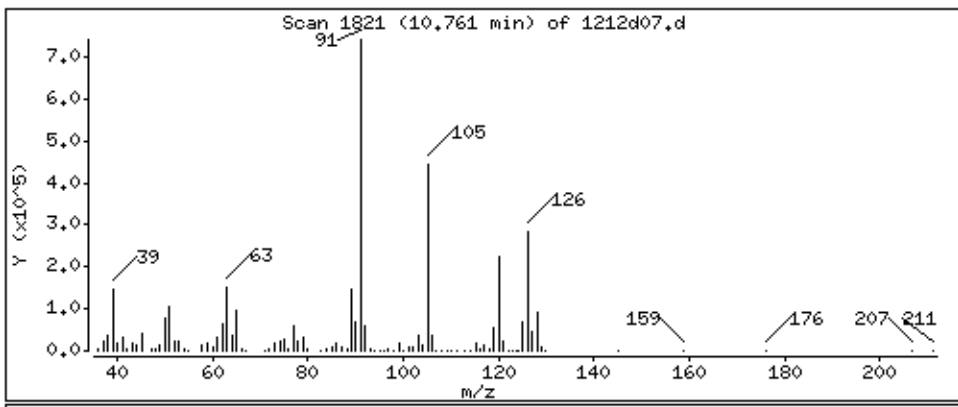
Operator: GEM

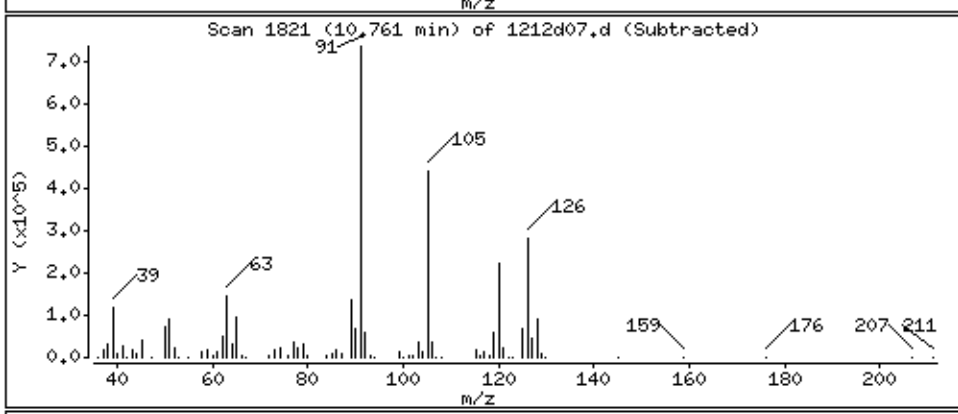
Column phase: RTX VMS 30m

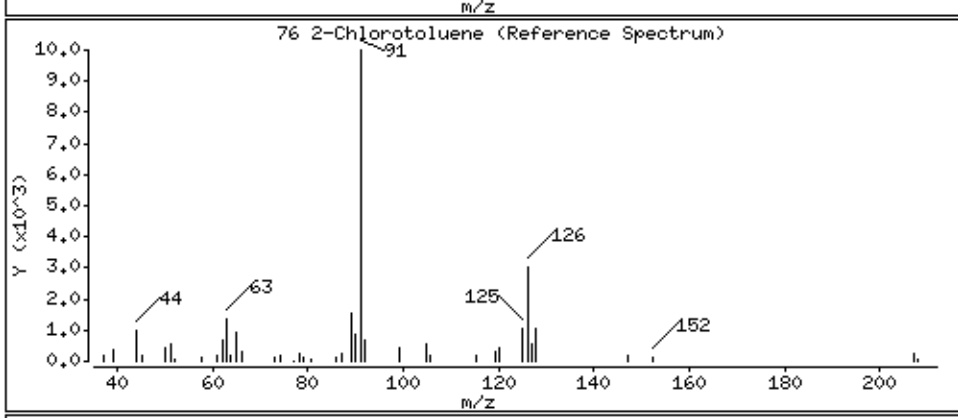
Column diameter: 0.25

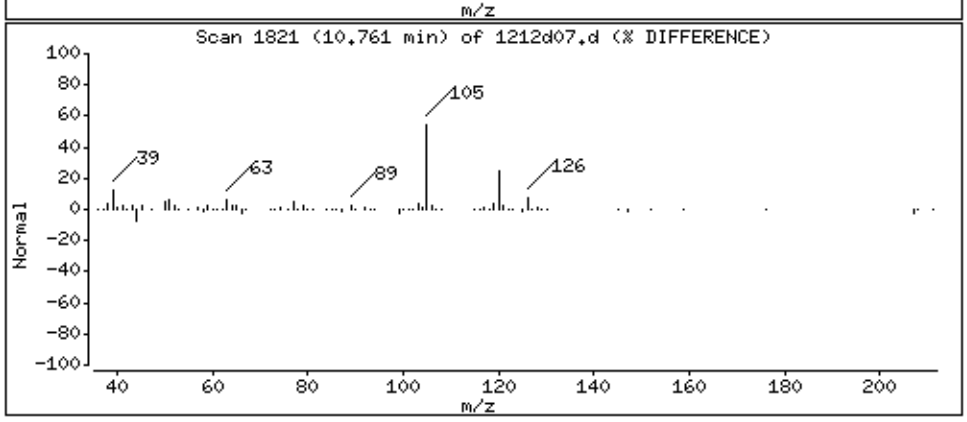
76 2-Chlorotoluene

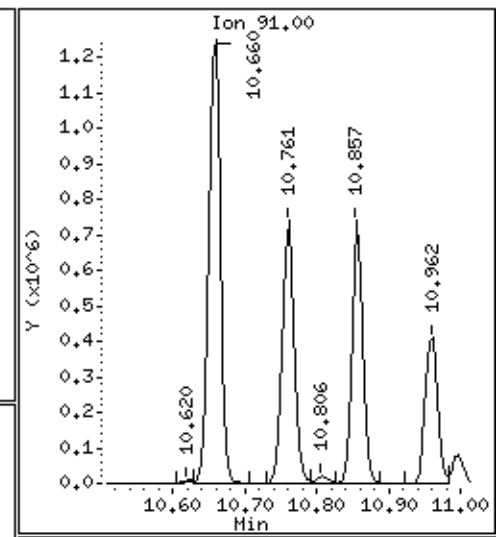
Concentration: 51.1 ug/L

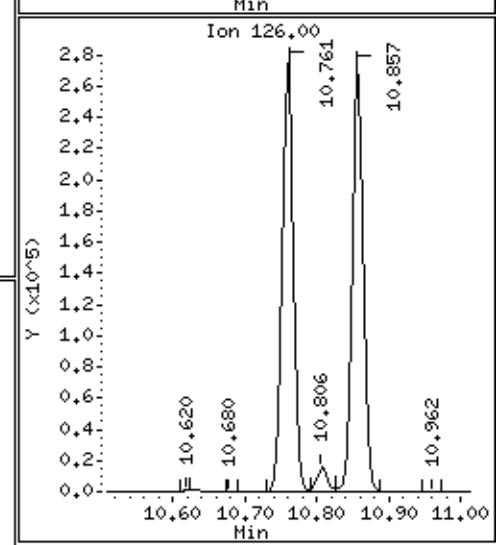












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

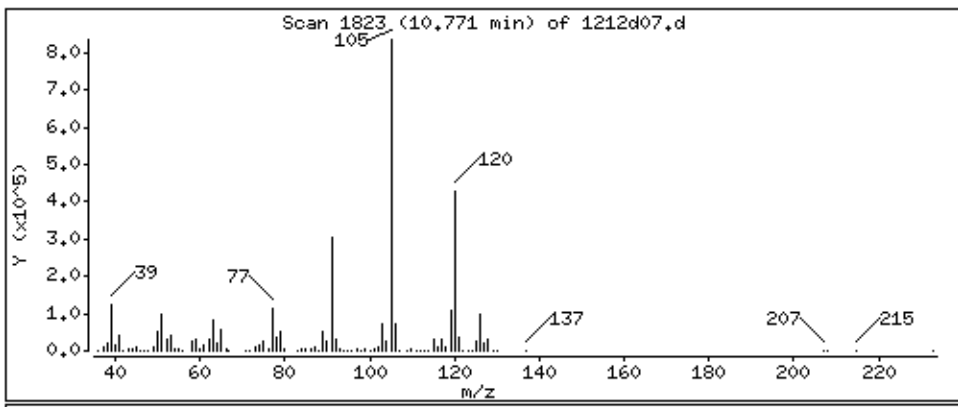
Operator: GEM

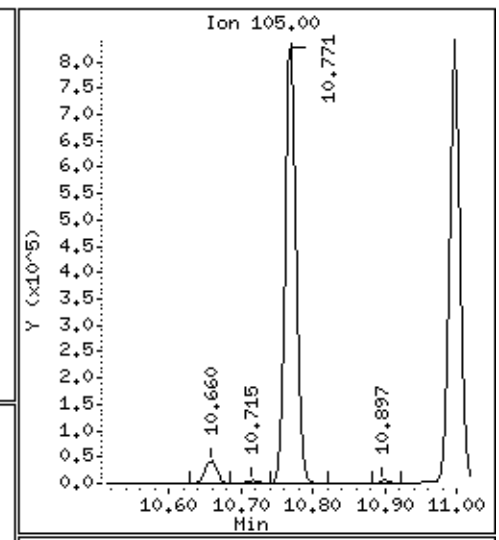
Column phase: RTX VMS 30m

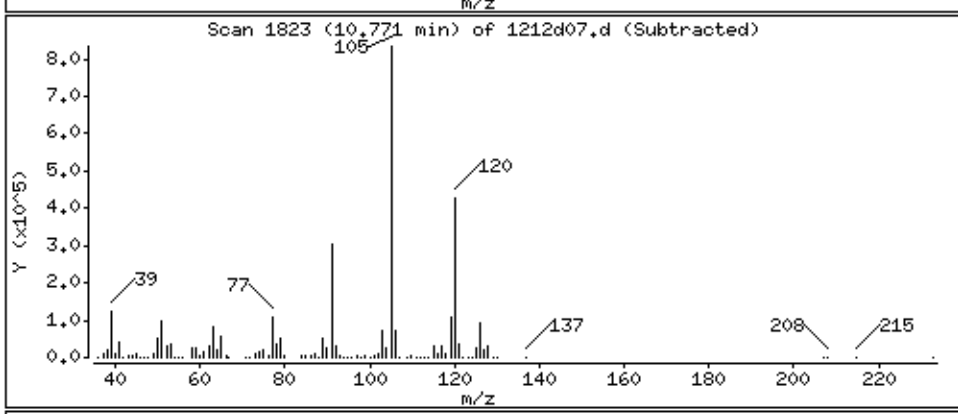
Column diameter: 0.25

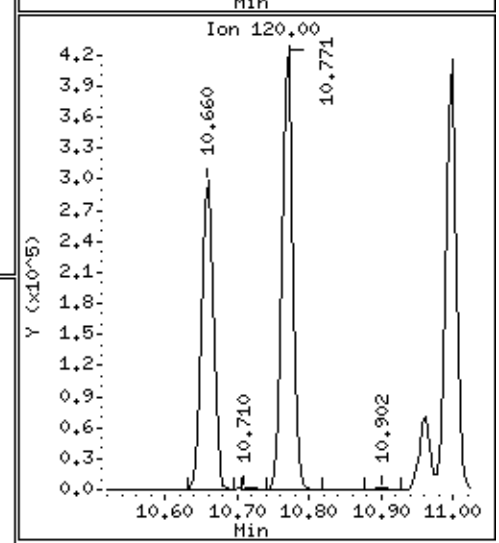
77 1,3,5-Trimethylbenzene

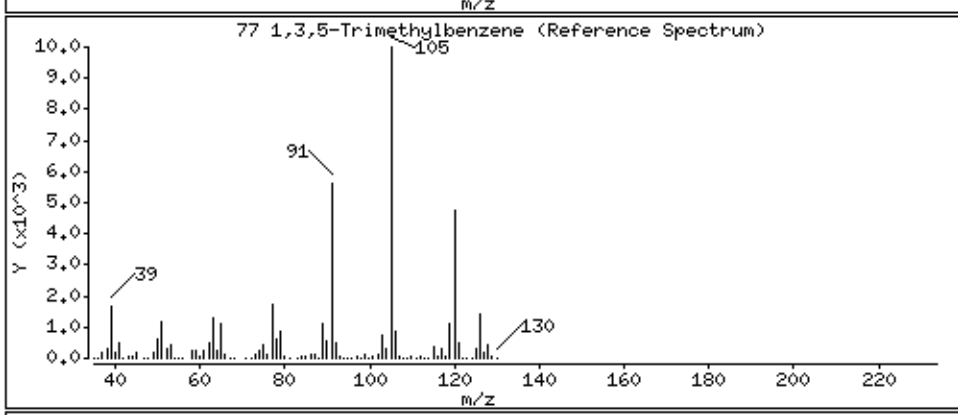
Concentration: 50.6 ug/L

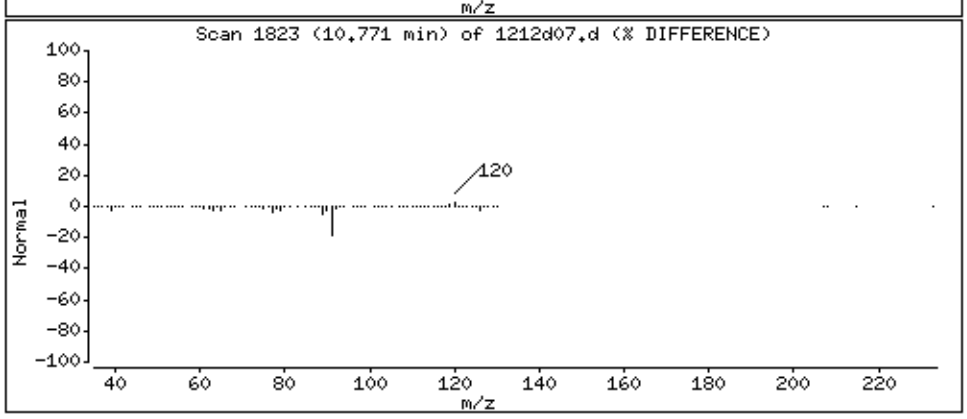












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

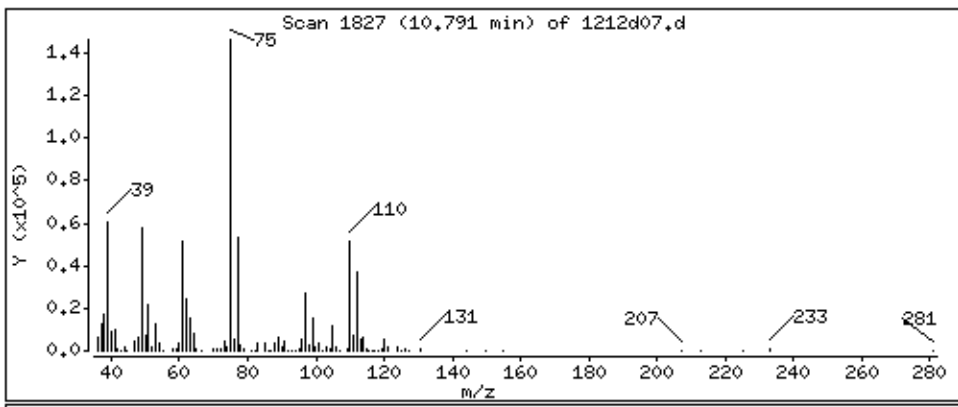
Client ID: MBLCS | Instrument: 20msvd.i

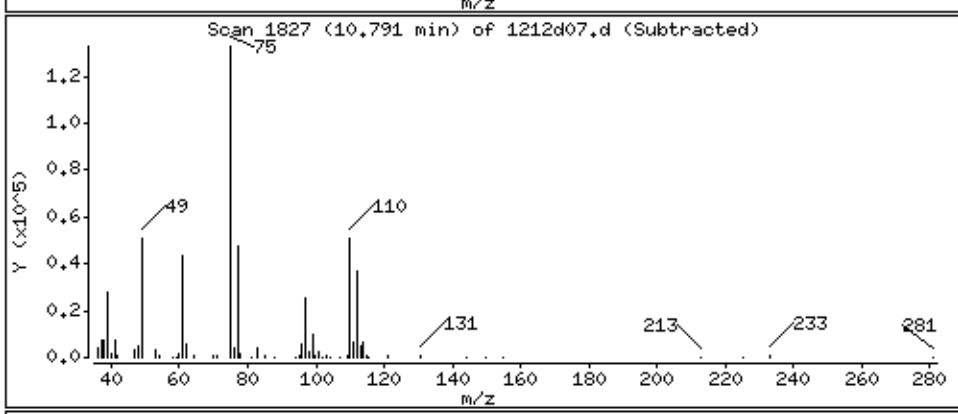
Sample Info: 415095,SPK

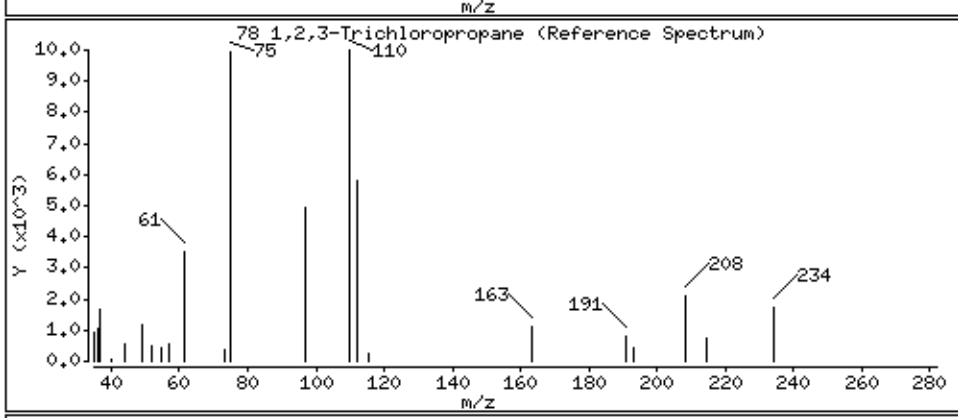
Purge Volume: 5.0 | Operator: GEM

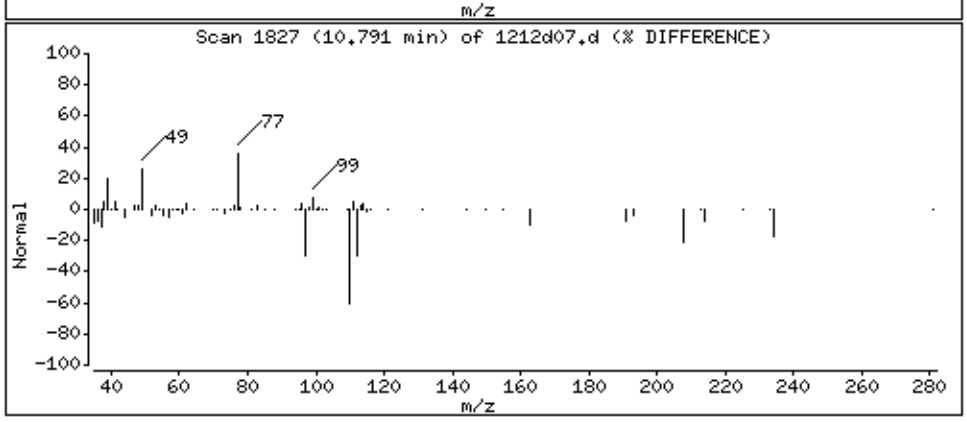
Column phase: RTX VMS 30m | Column diameter: 0.25

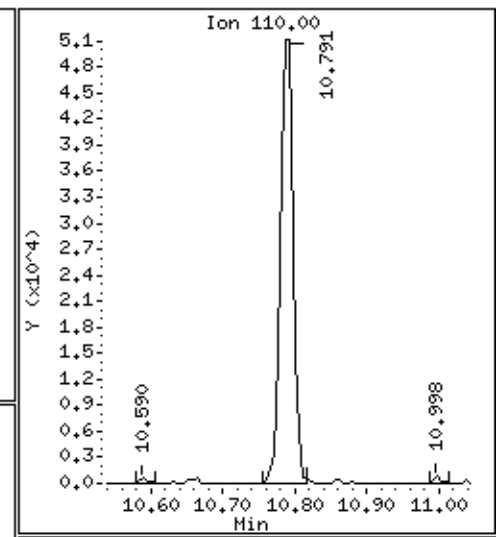
78 1,2,3-Trichloropropane | Concentration: 49.3 ug/L

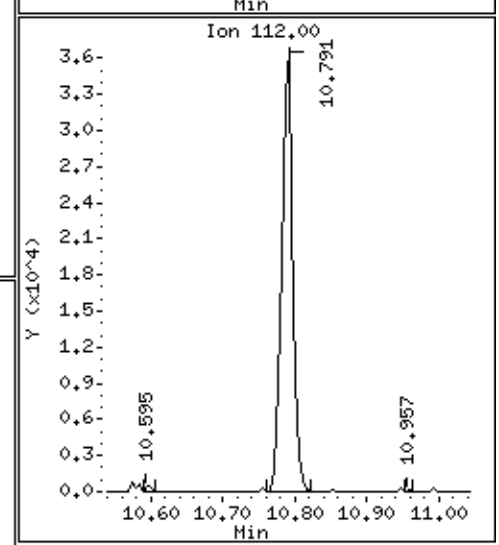












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

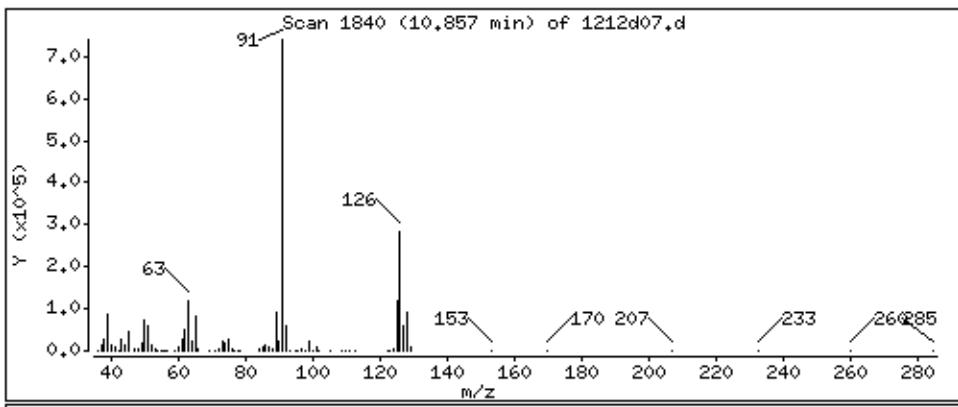
Operator: GEM

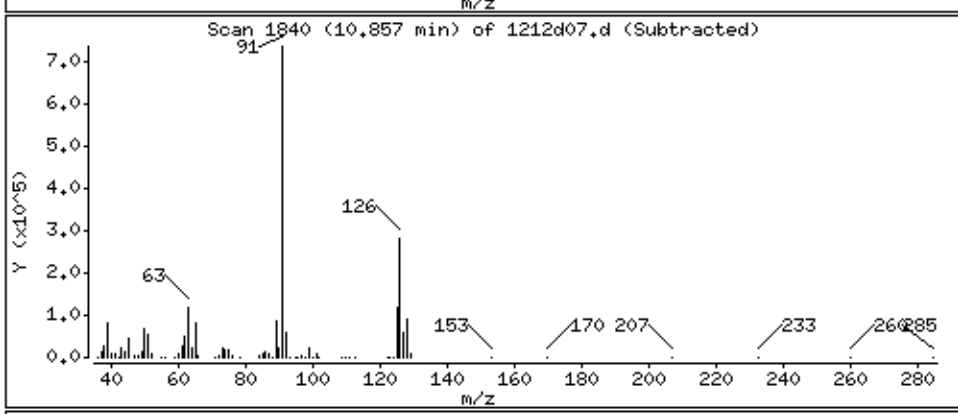
Column phase: RTX VMS 30m

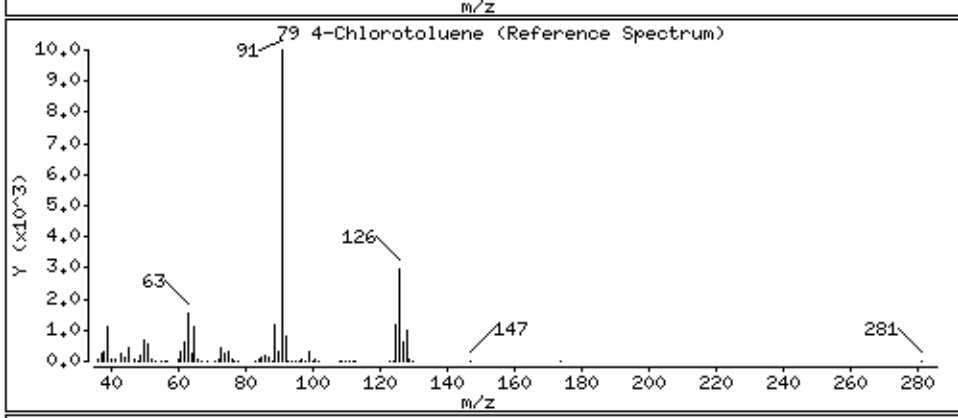
Column diameter: 0.25

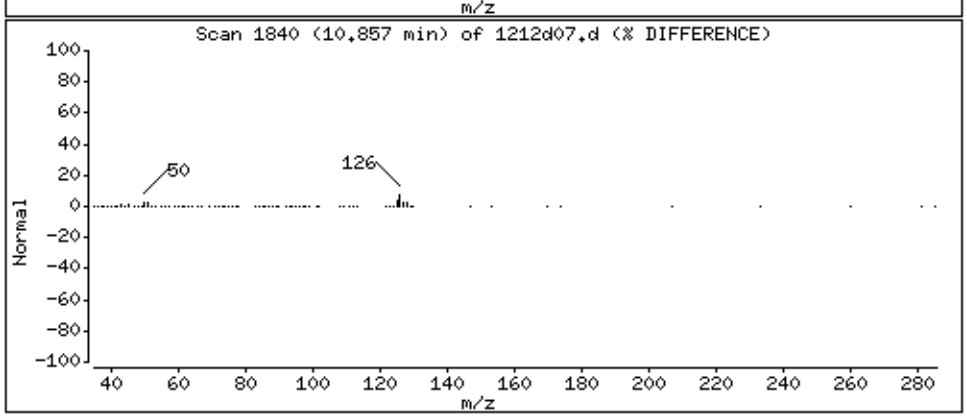
79 4-Chlorotoluene

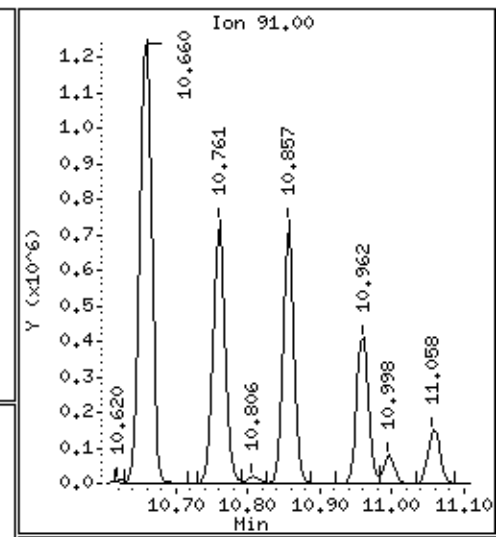
Concentration: 50.2 ug/L

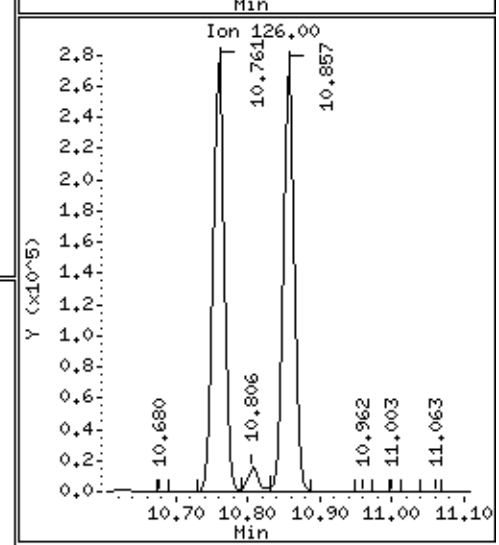












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

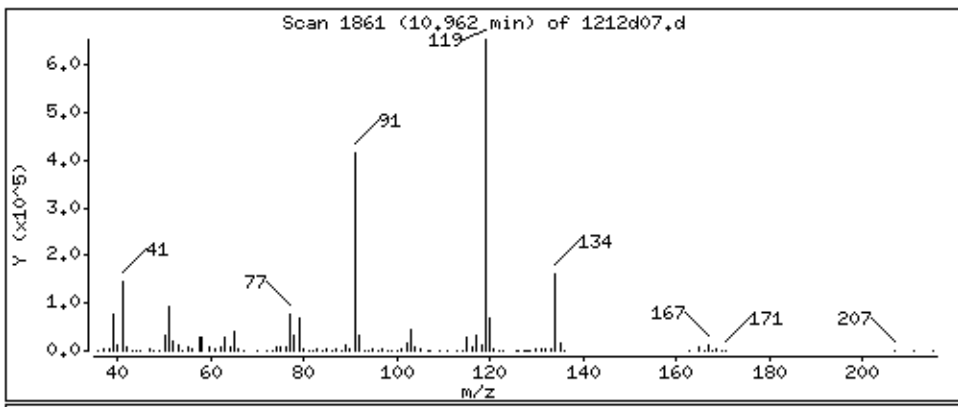
Operator: GEM

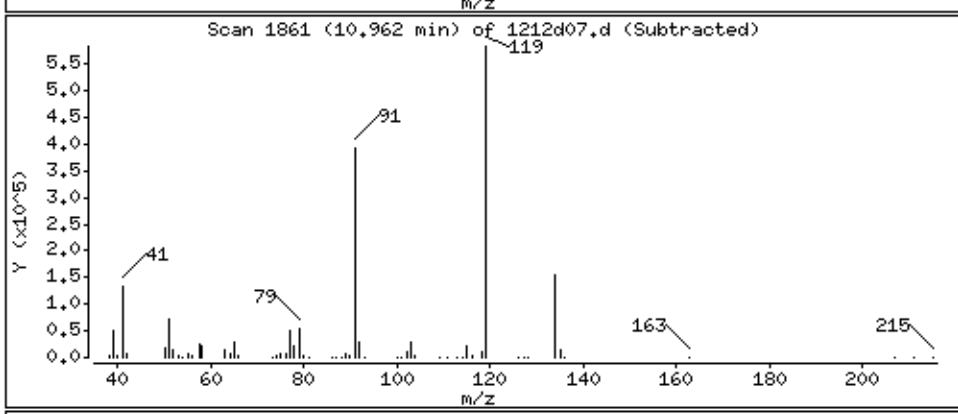
Column phase: RTX VMS 30m

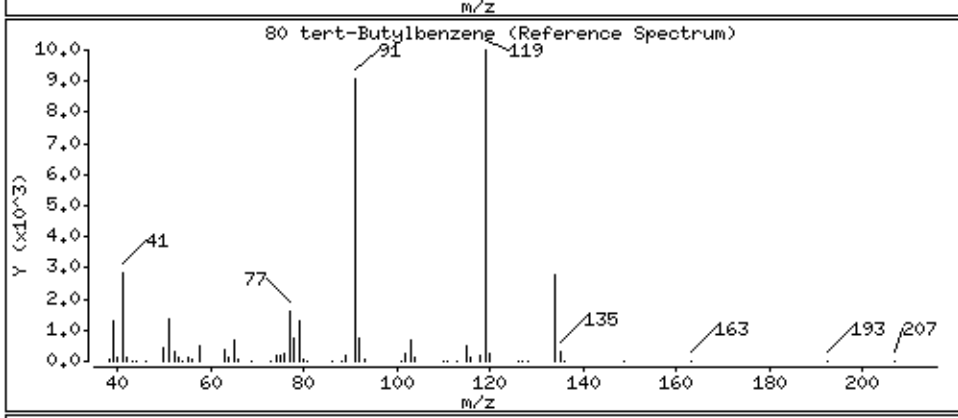
Column diameter: 0.25

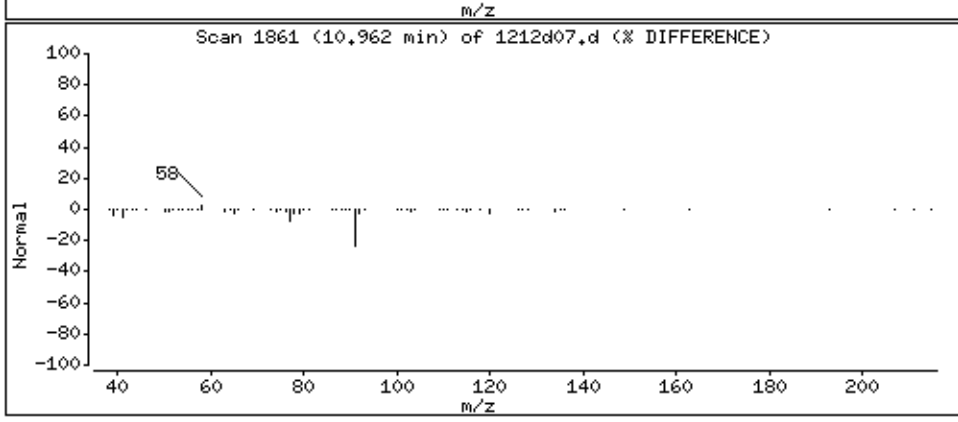
80 tert-Butylbenzene

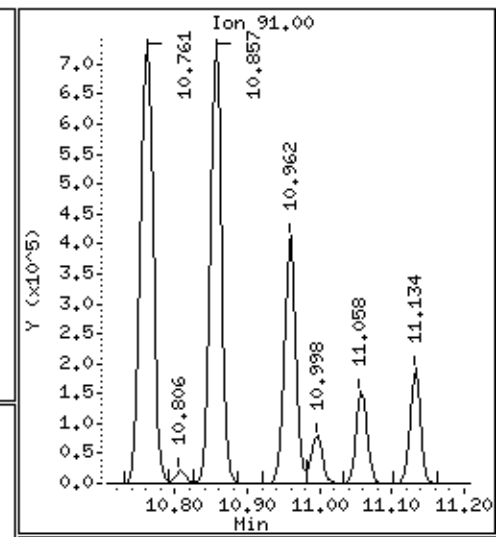
Concentration: 49.8 ug/L

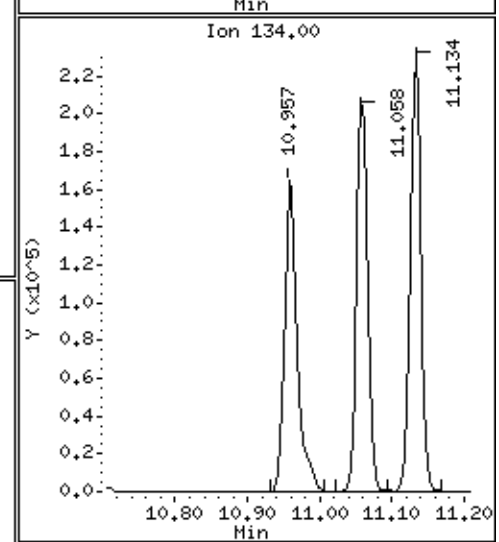


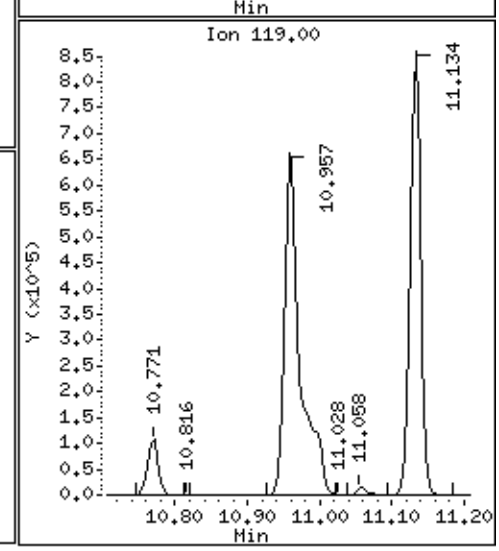












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

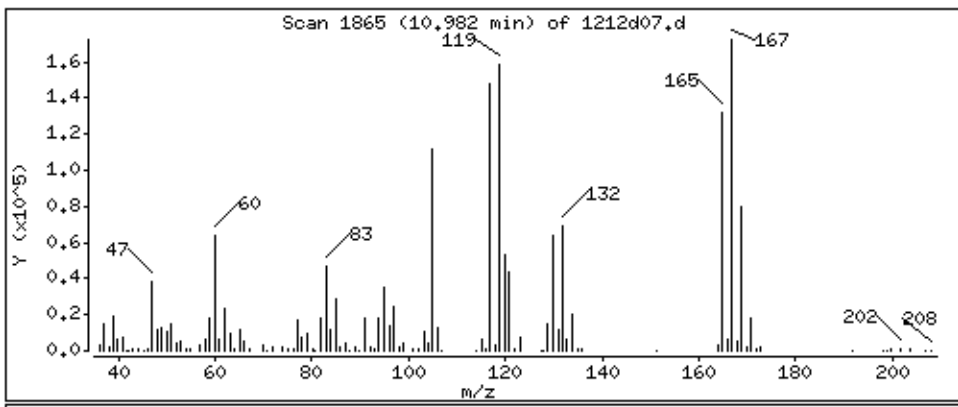
Operator: GEM

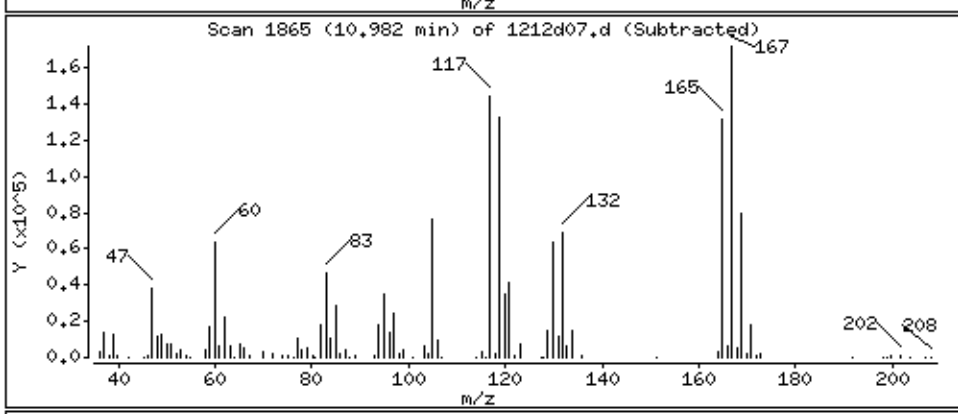
Column phase: RTX VMS 30m

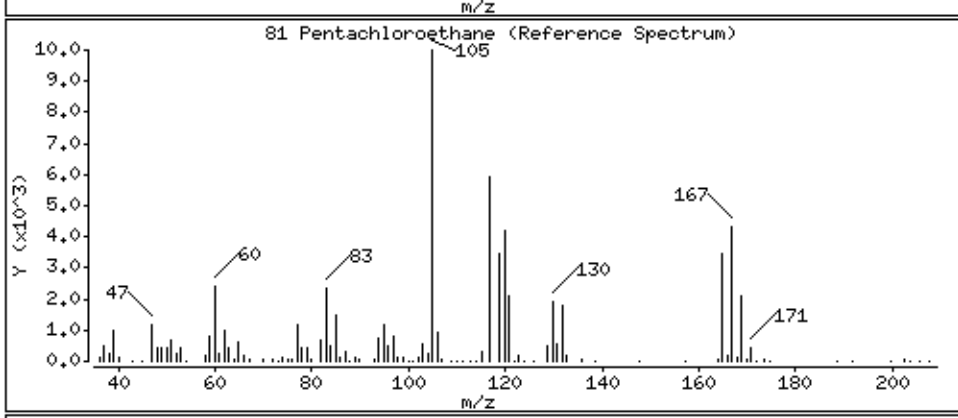
Column diameter: 0.25

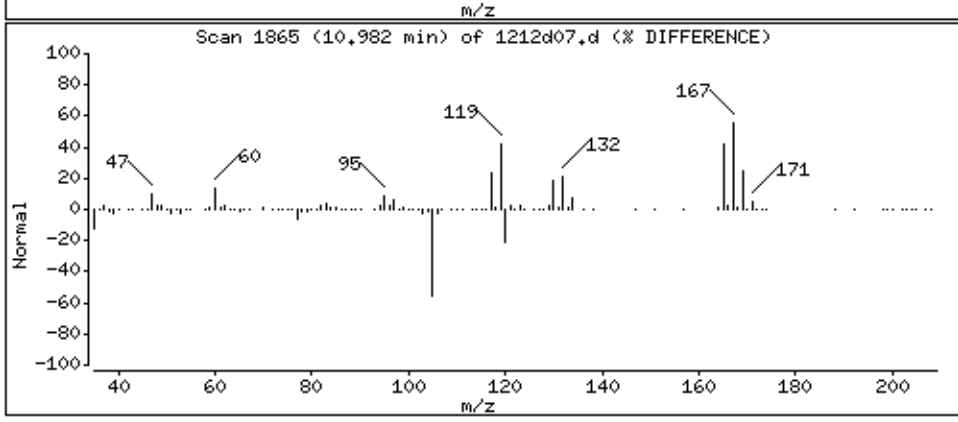
81 Pentachloroethane

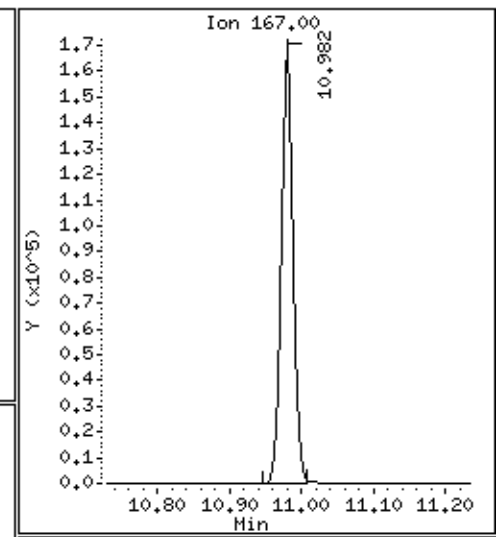
Concentration: 49.0 ug/L

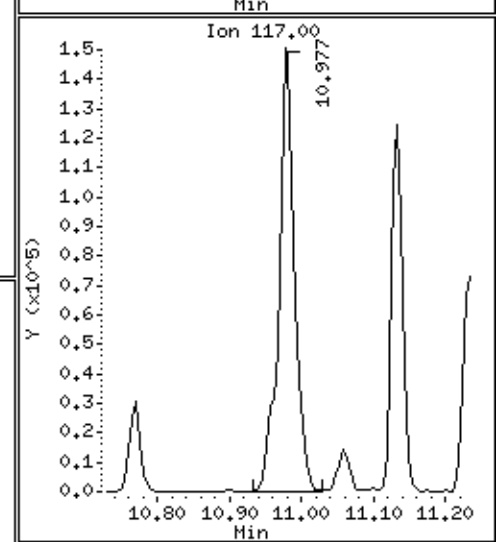


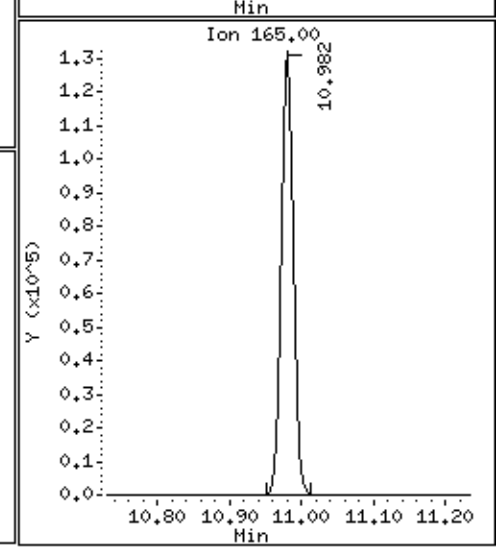












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

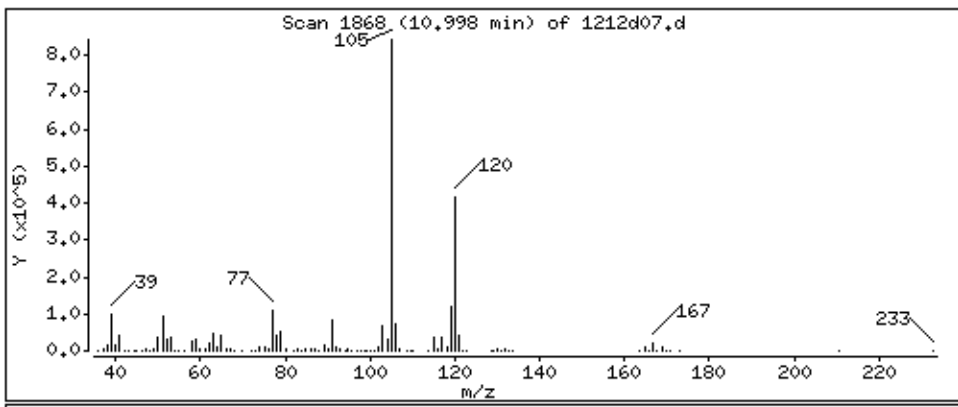
Operator: GEM

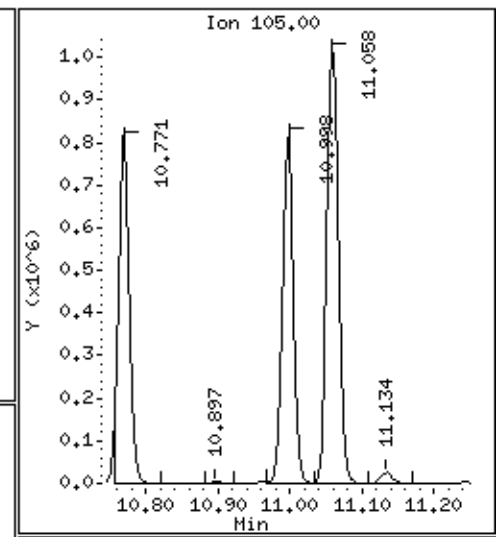
Column phase: RTX VMS 30m

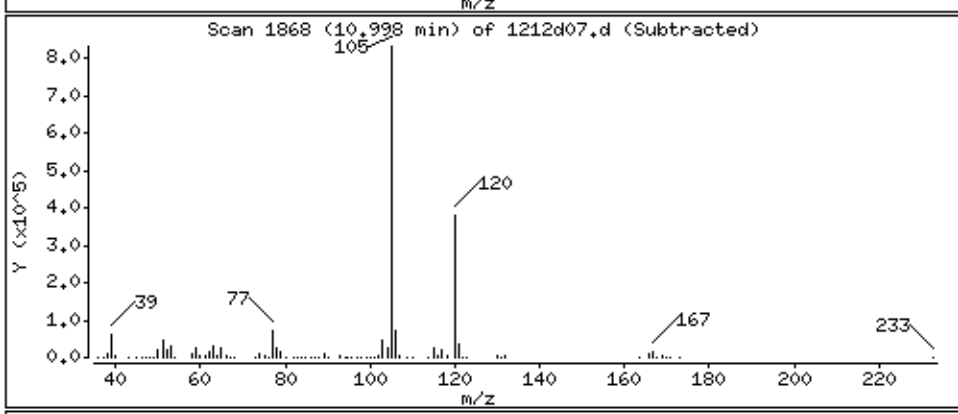
Column diameter: 0.25

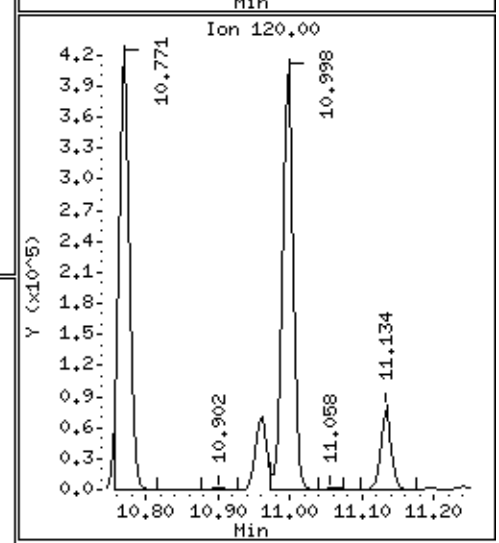
82 1,2,4-Trimethylbenzene

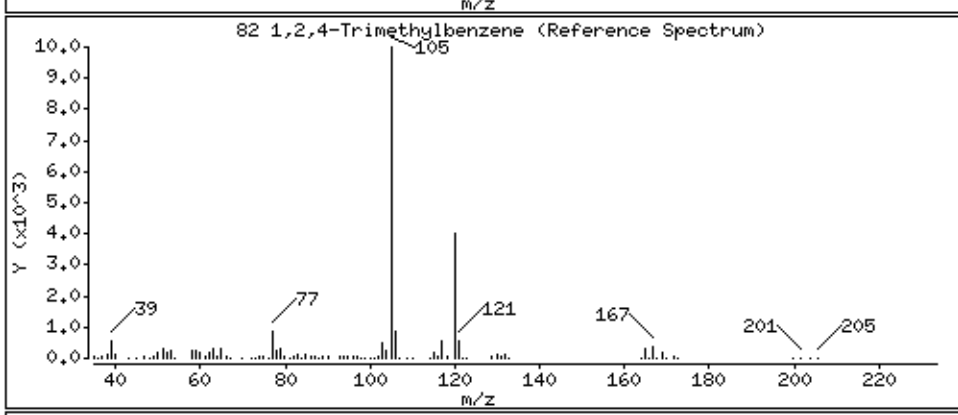
Concentration: 51.0 ug/L

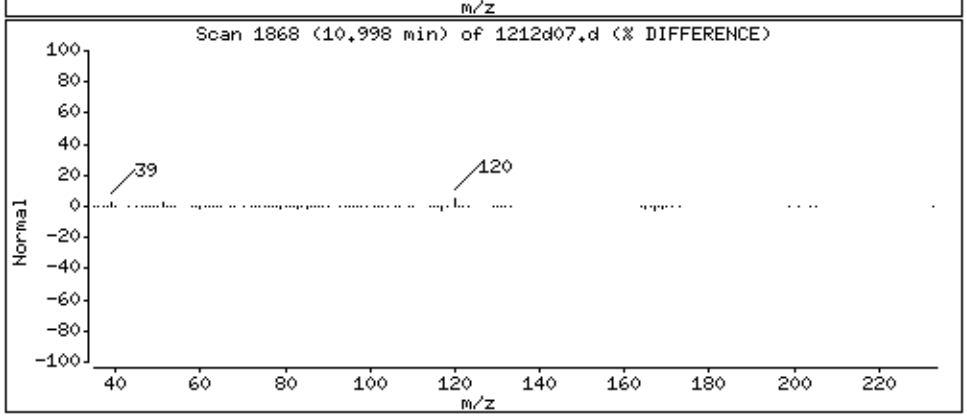












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Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

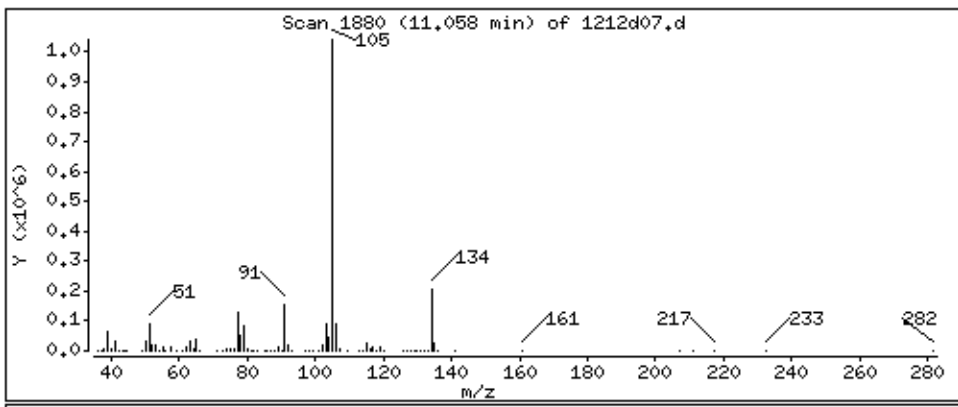
Operator: GEM

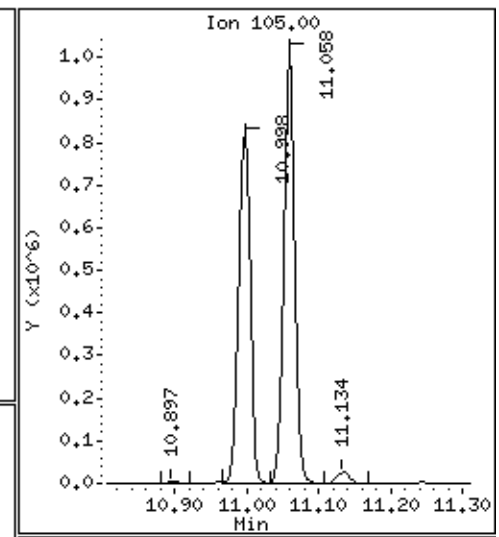
Column phase: RTX VMS 30m

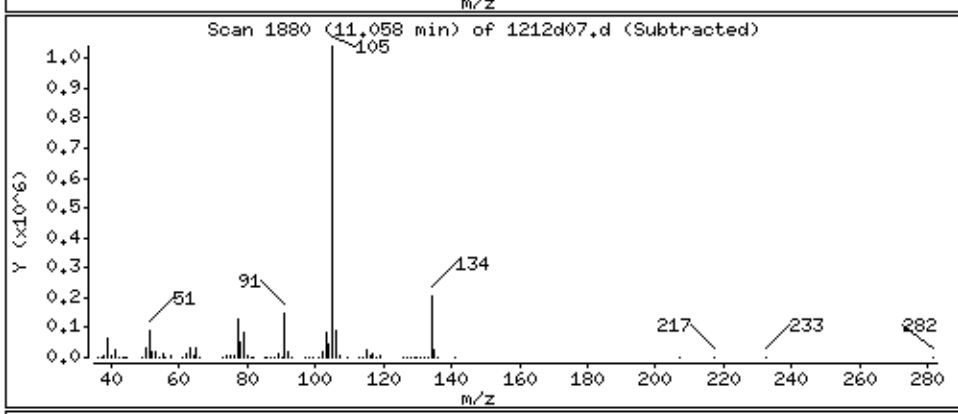
Column diameter: 0.25

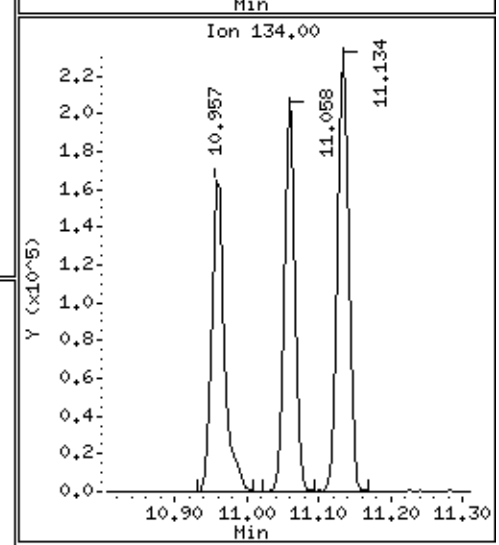
83 sec-Butylbenzene

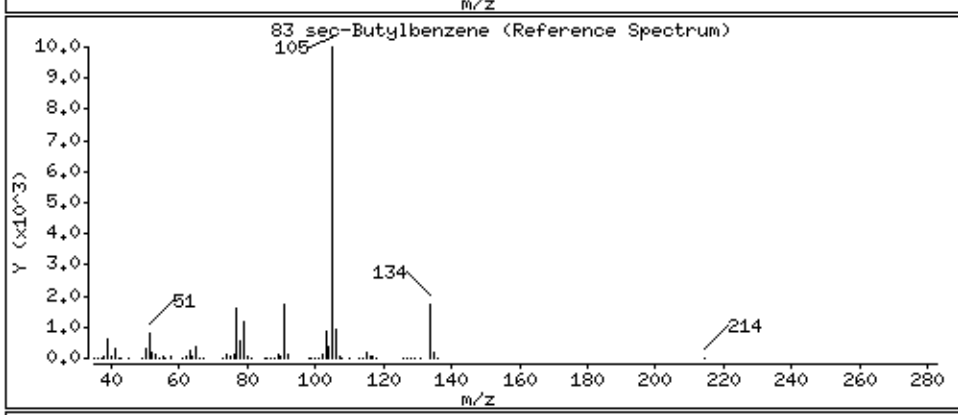
Concentration: 49.4 ug/L

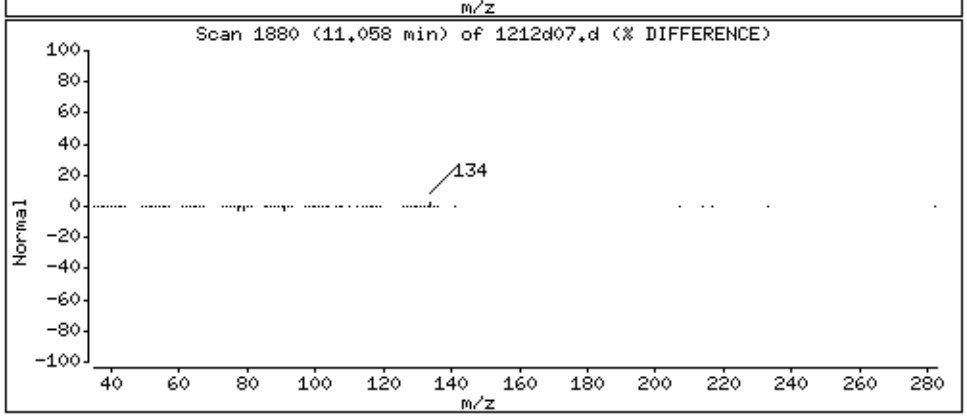












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

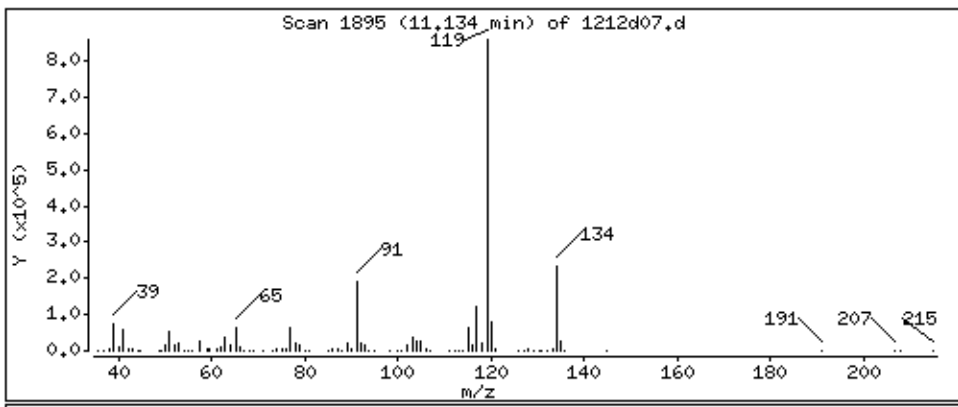
Operator: GEM

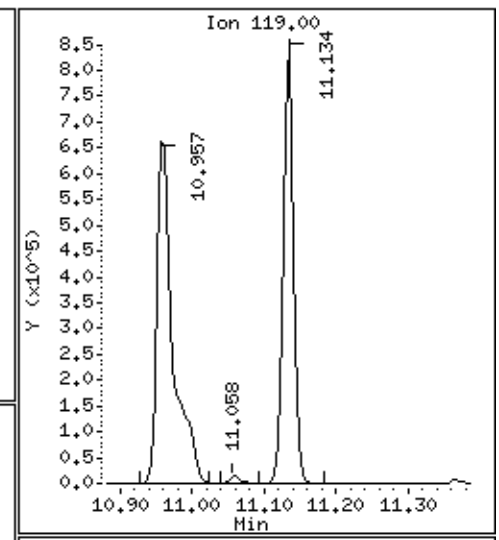
Column phase: RTX VMS 30m

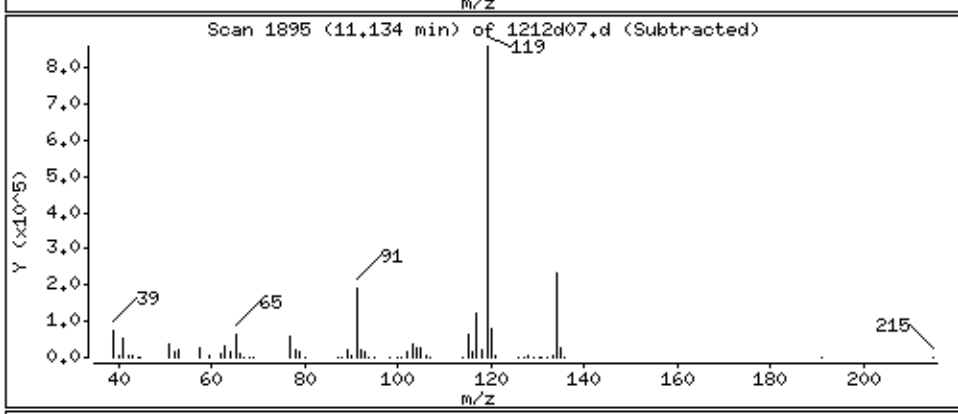
Column diameter: 0.25

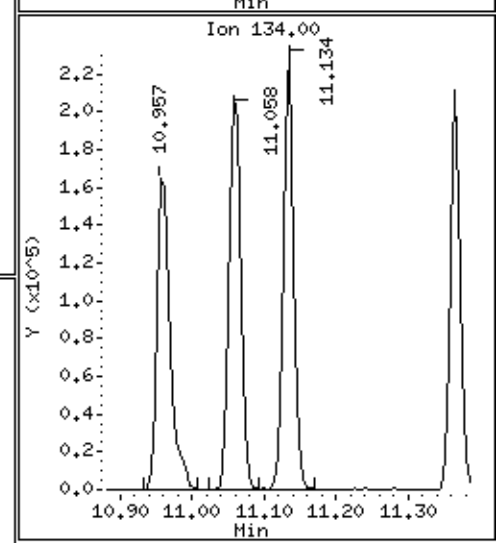
84 p-Isopropyltoluene

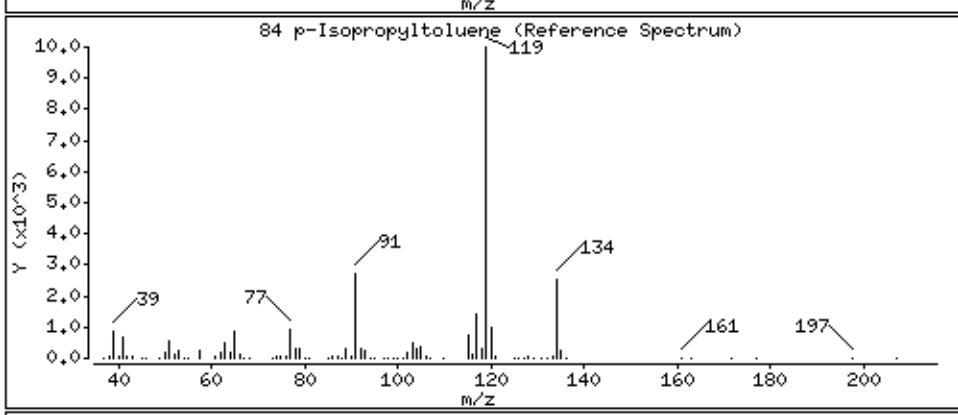
Concentration: 48.1 ug/L

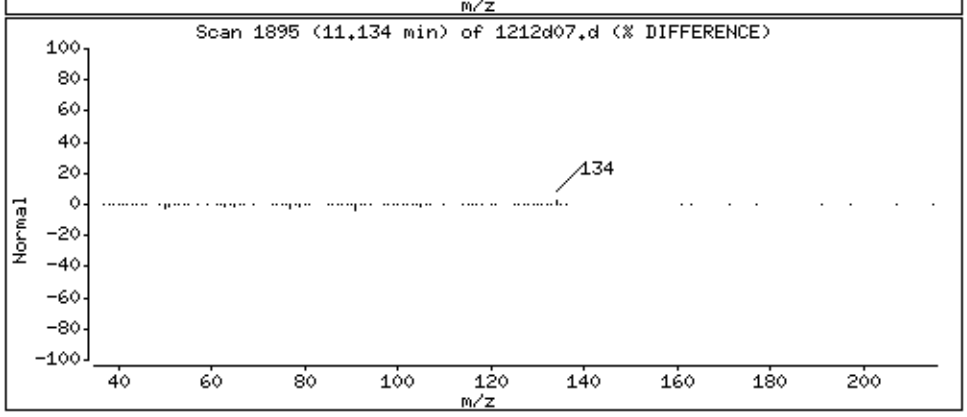












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

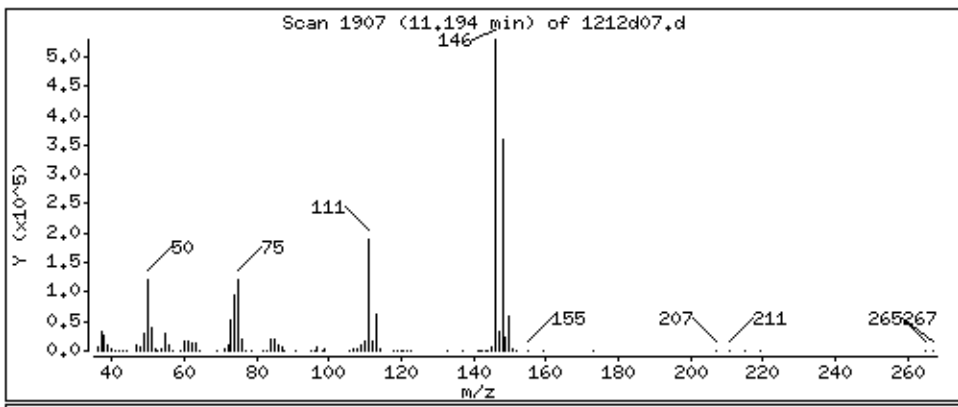
Operator: GEM

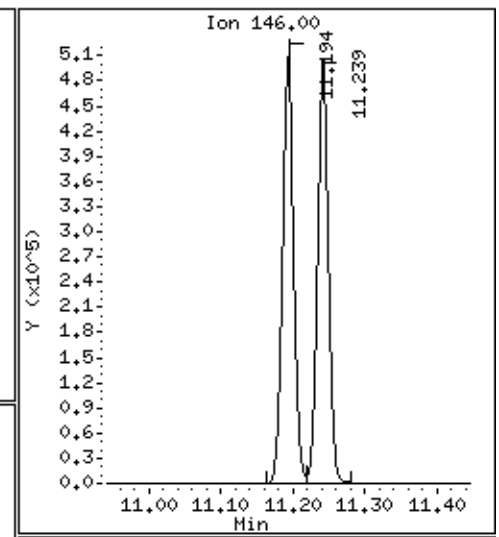
Column phase: RTX VMS 30m

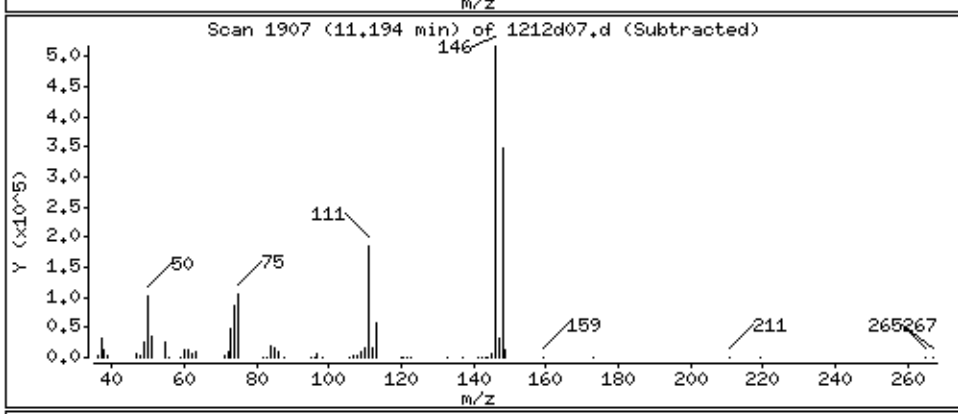
Column diameter: 0.25

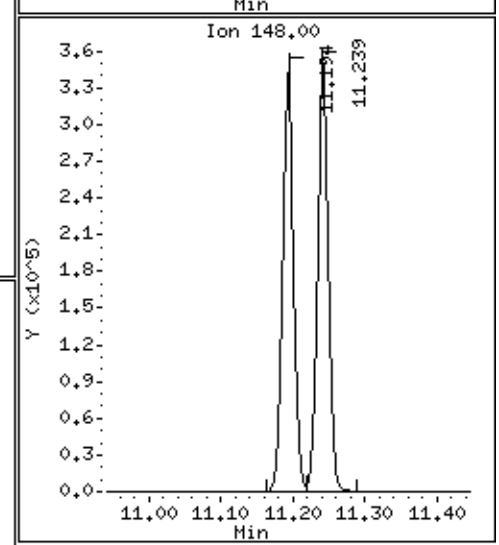
85 1,3-Dichlorobenzene

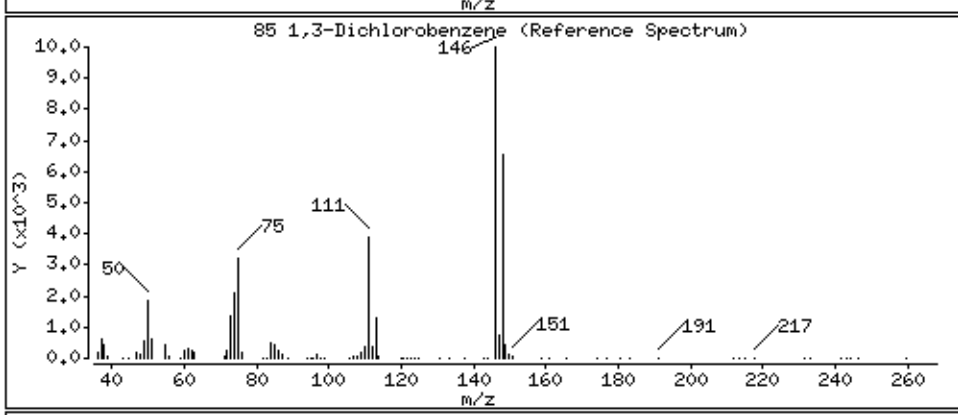
Concentration: 51.7 ug/L

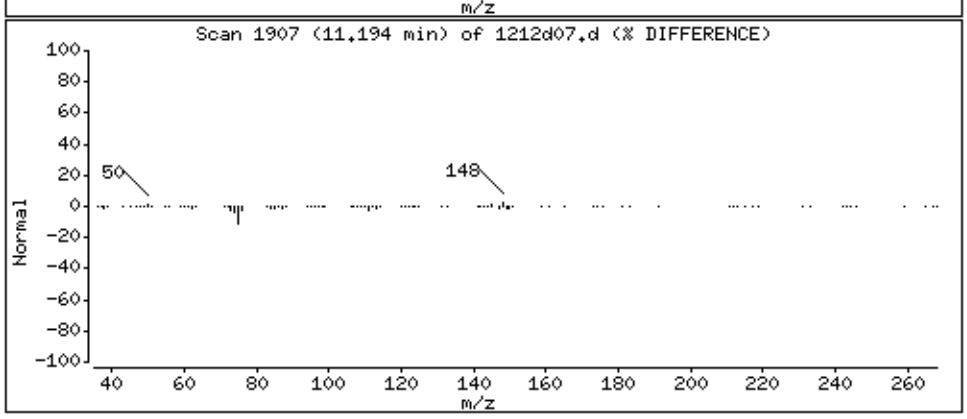












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

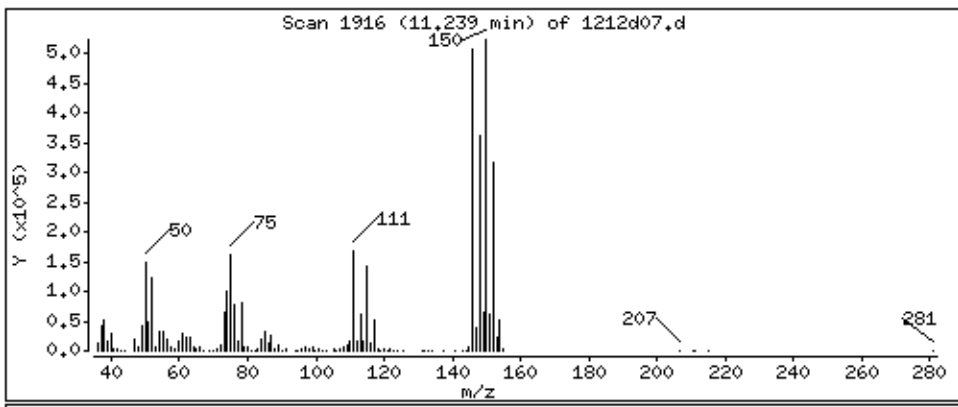
Operator: GEM

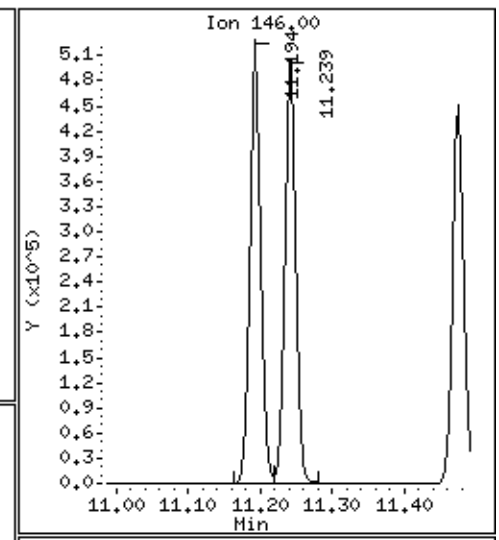
Column phase: RTX VMS 30m

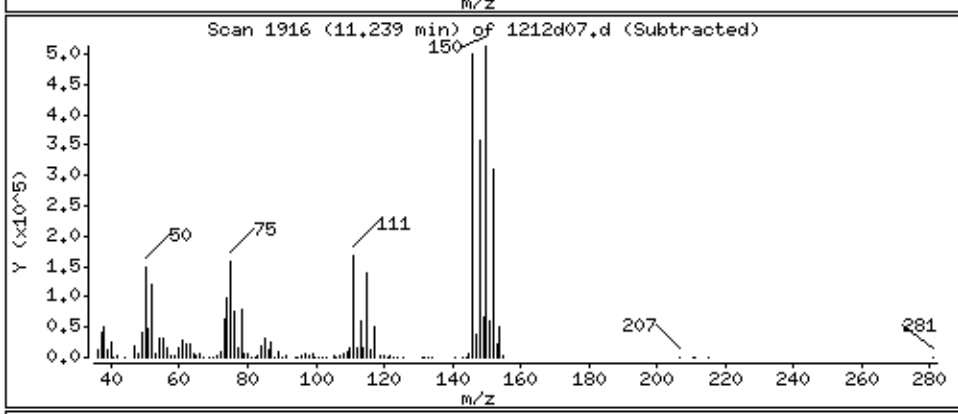
Column diameter: 0.25

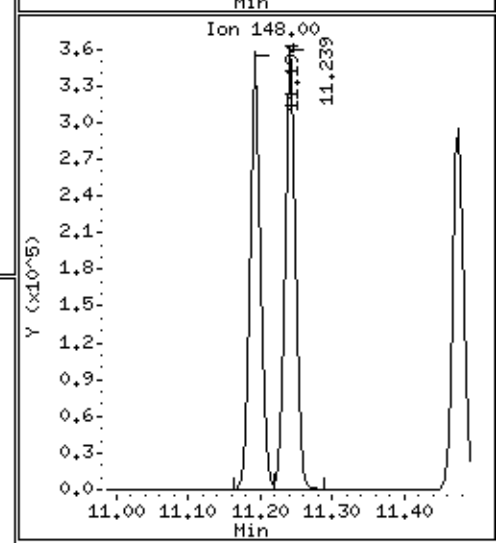
87 1,4-Dichlorobenzene

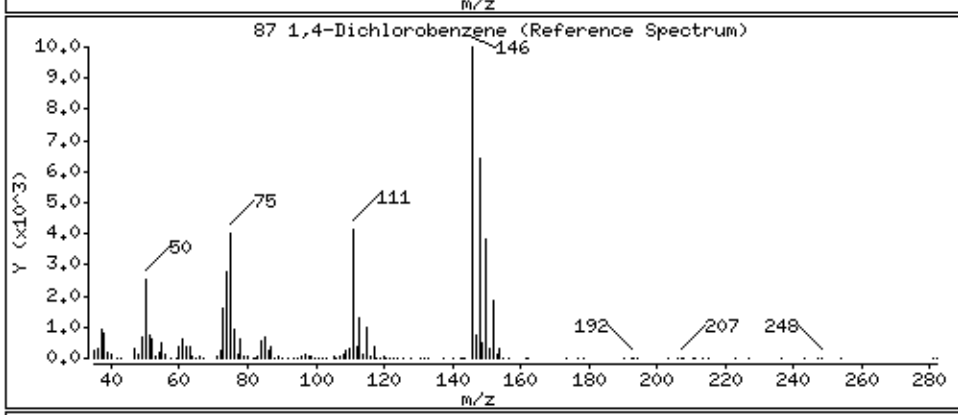
Concentration: 50.3 ug/L

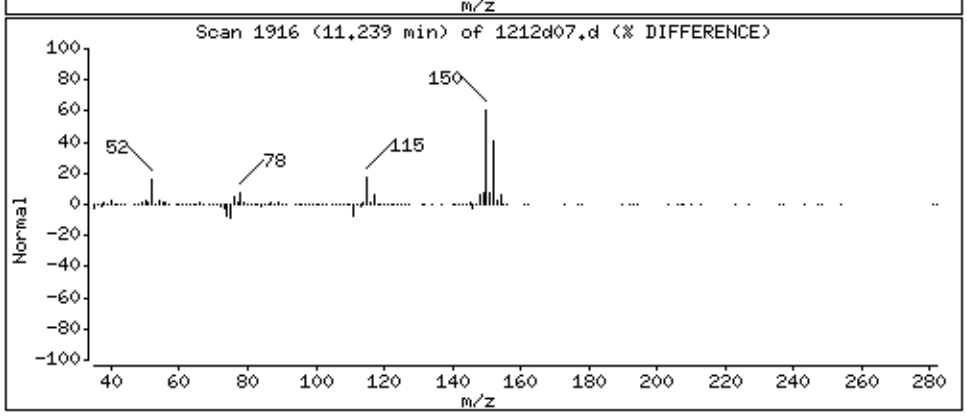












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

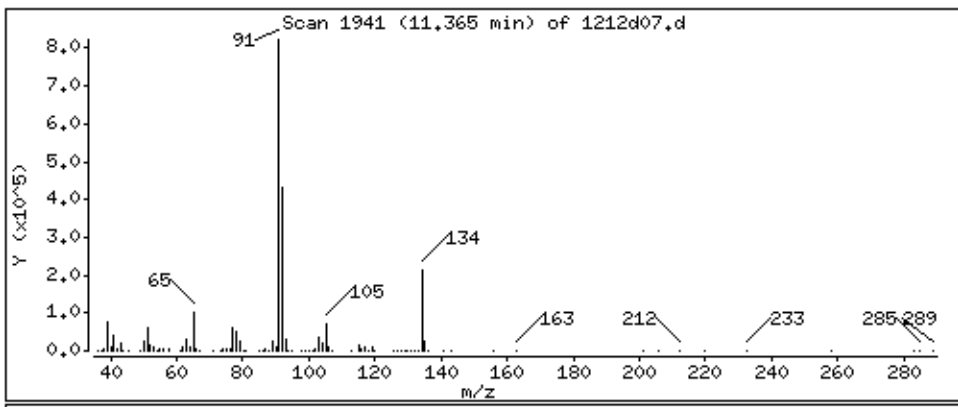
Operator: GEM

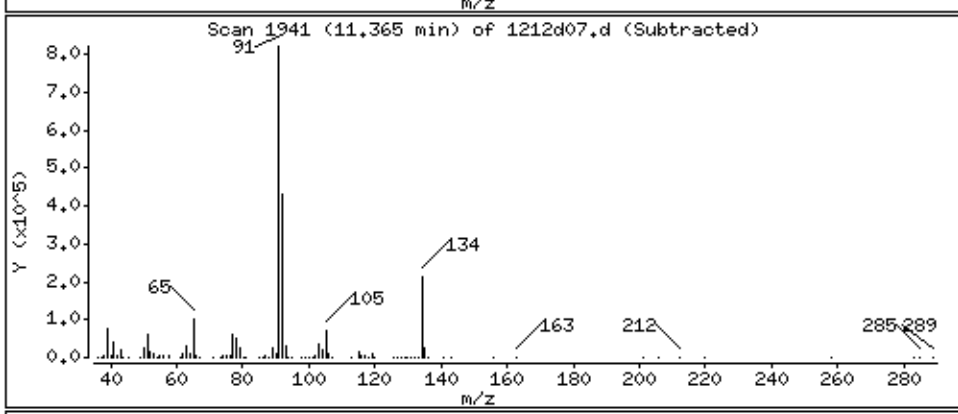
Column phase: RTX VMS 30m

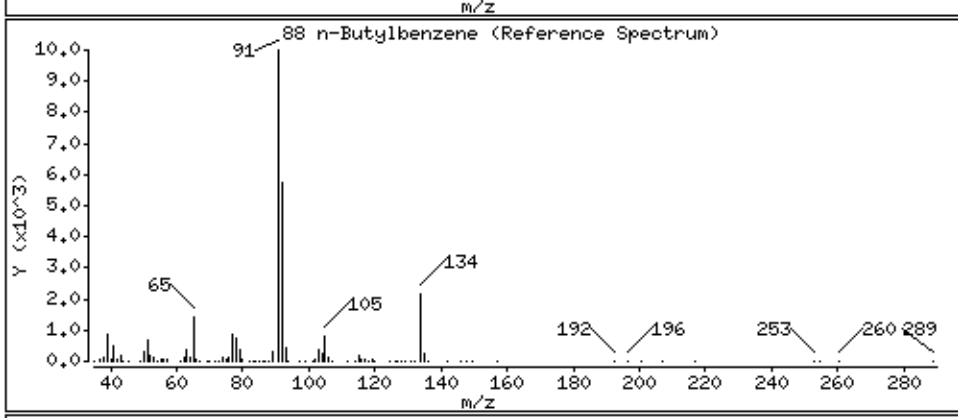
Column diameter: 0.25

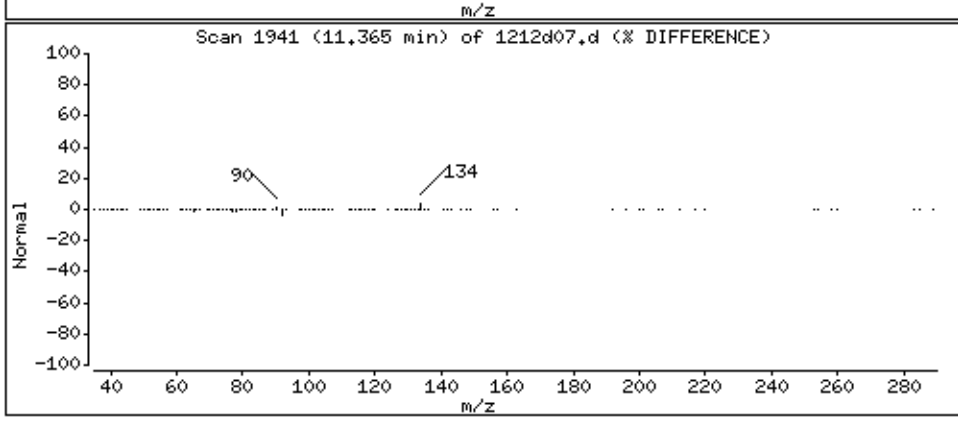
88 n-Butylbenzene

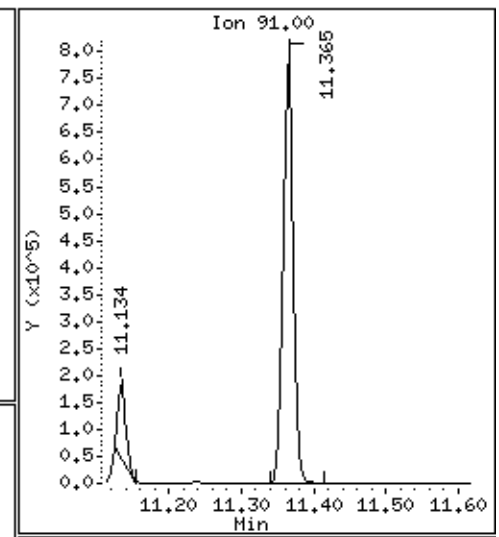
Concentration: 50.0 ug/L

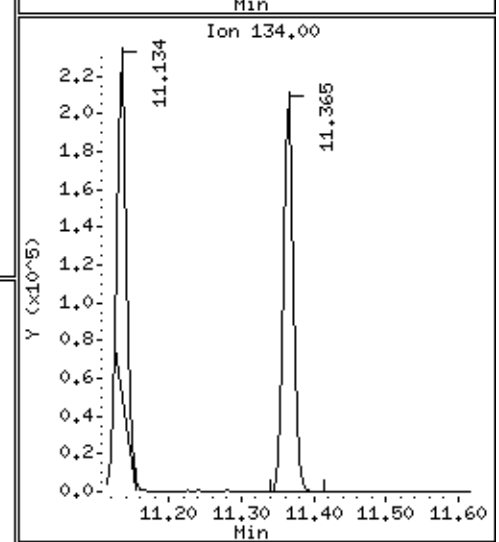


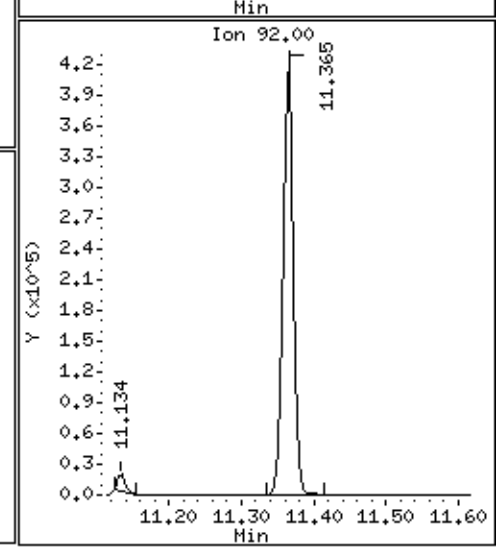












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

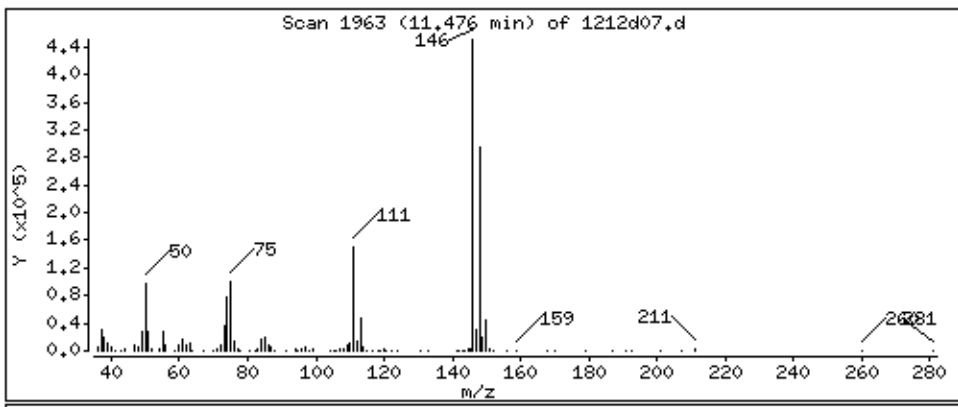
Operator: GEM

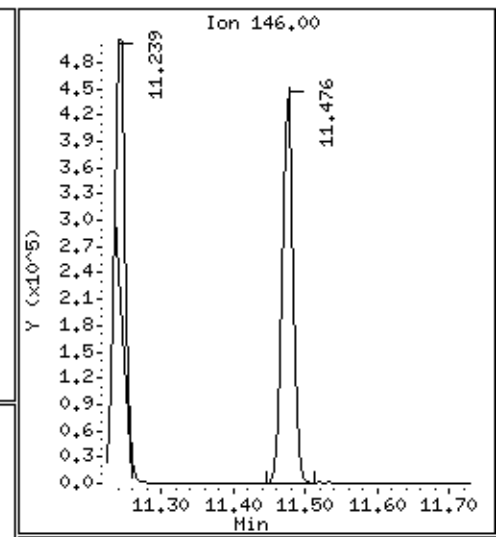
Column phase: RTX VMS 30m

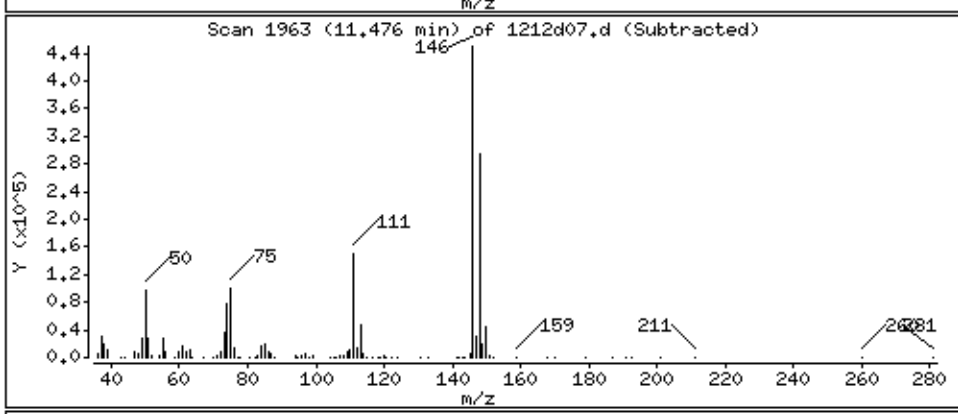
Column diameter: 0.25

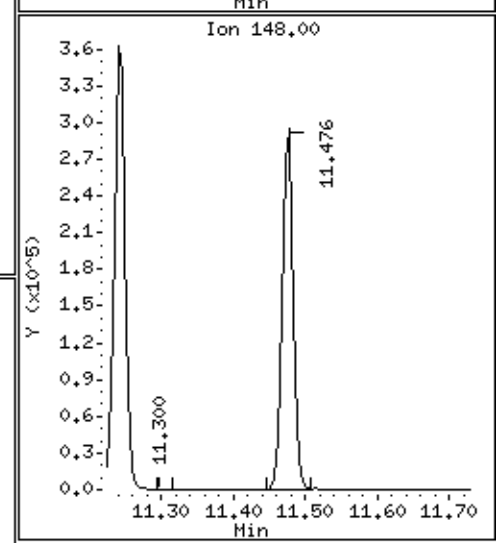
89 1,2-Dichlorobenzene

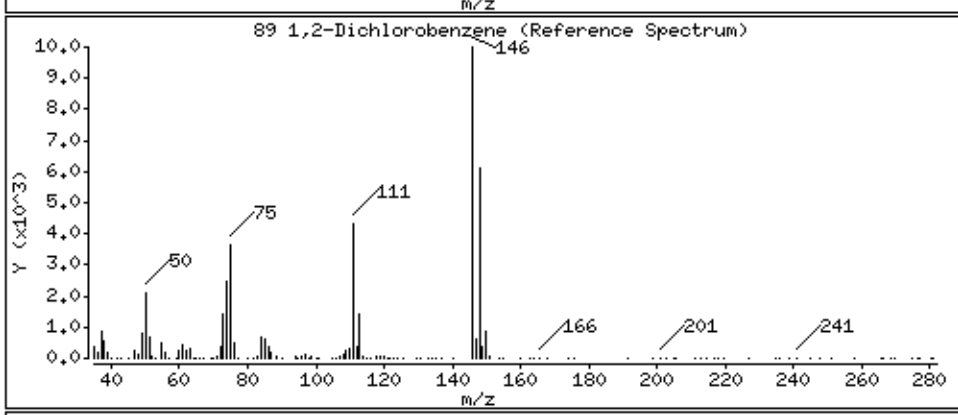
Concentration: 50.8 ug/L

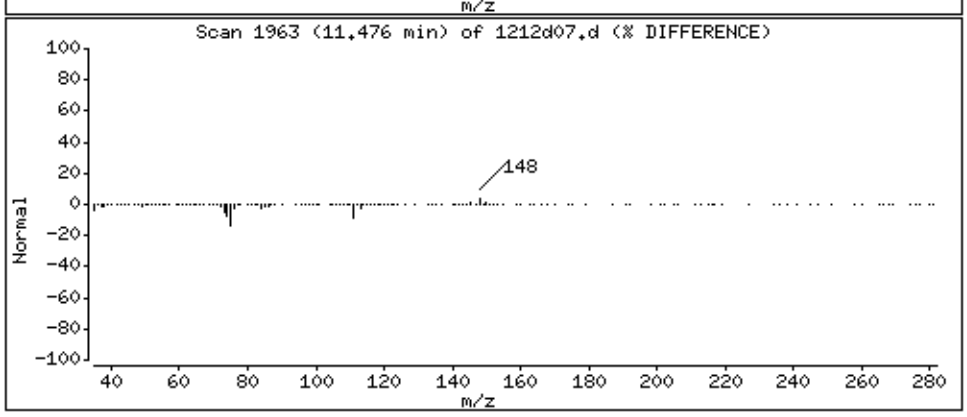












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

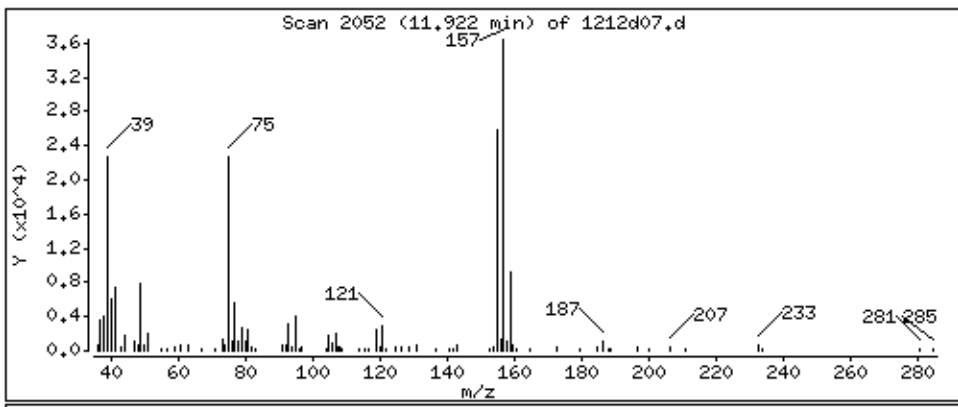
Operator: GEM

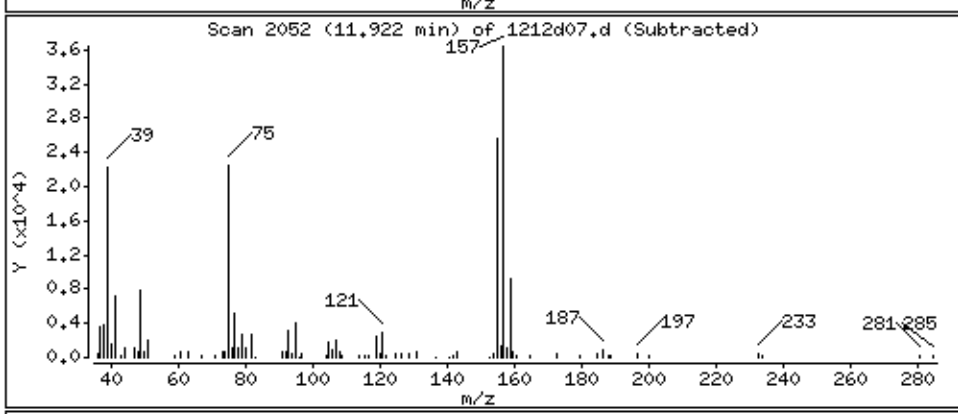
Column phase: RTX VMS 30m

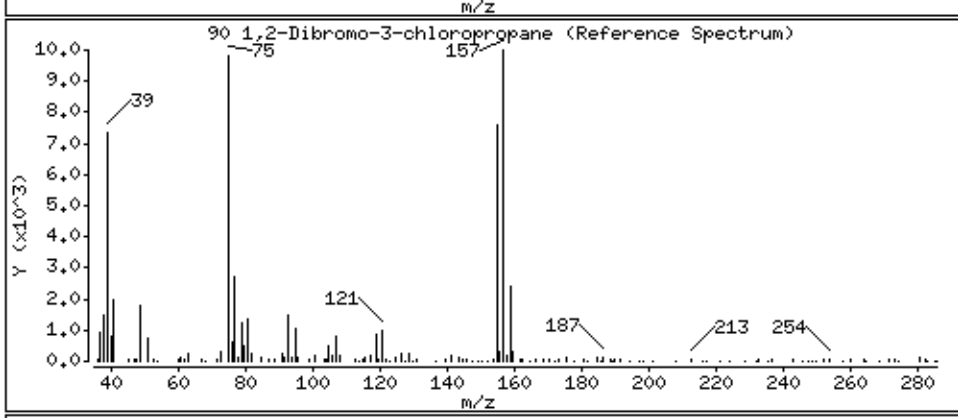
Column diameter: 0.25

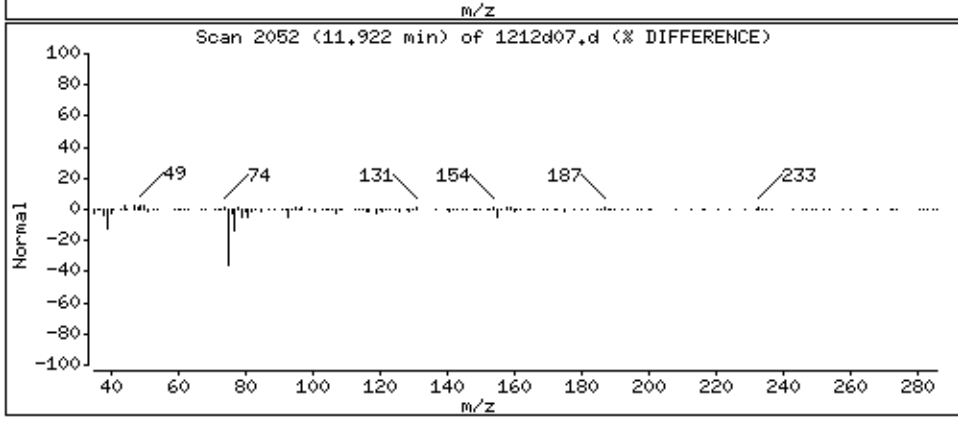
90 1,2-Dibromo-3-chloropropane

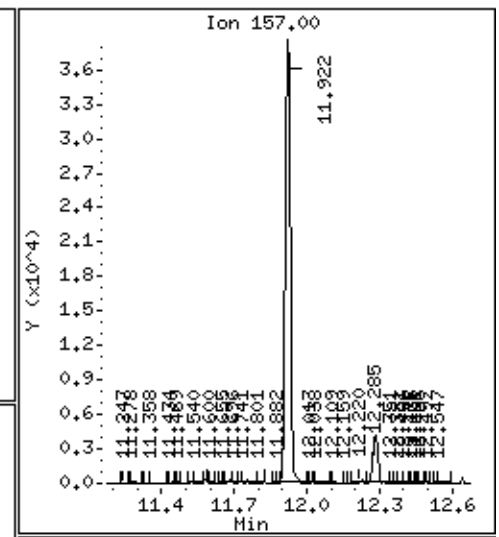
Concentration: 44.7 ug/L

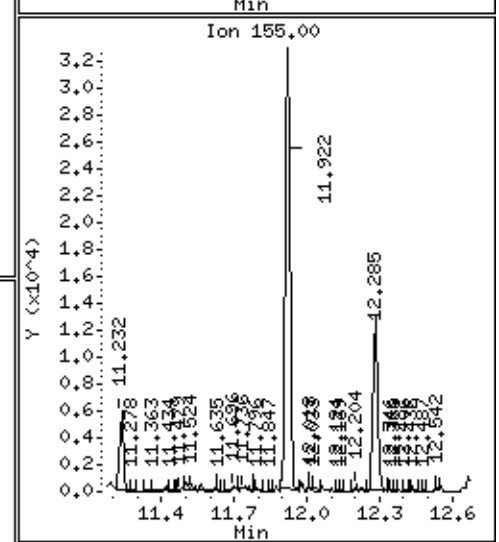


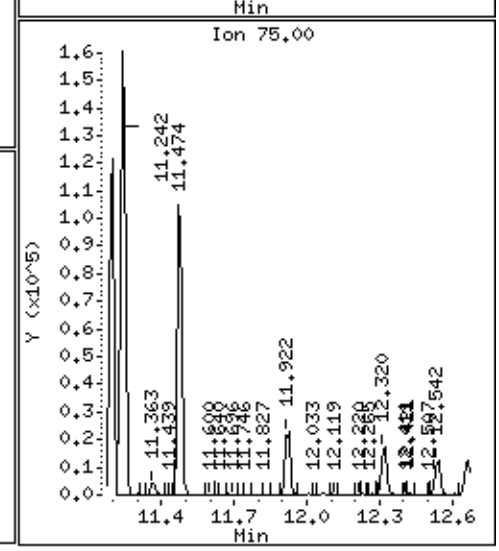












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

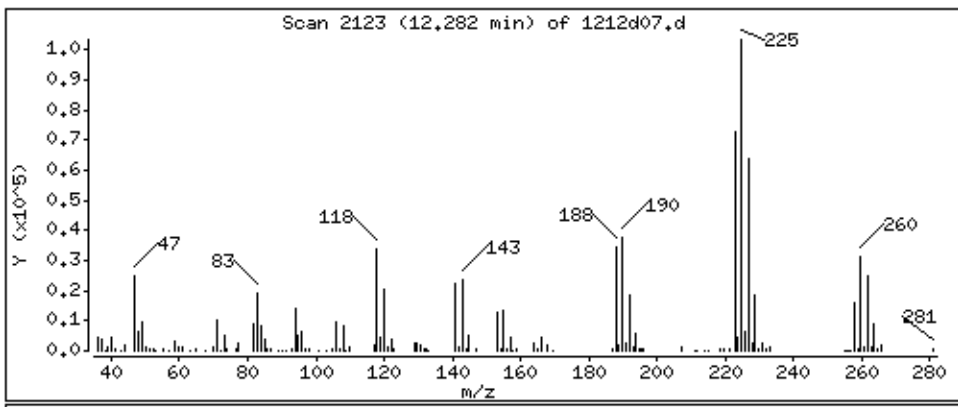
Operator: GEM

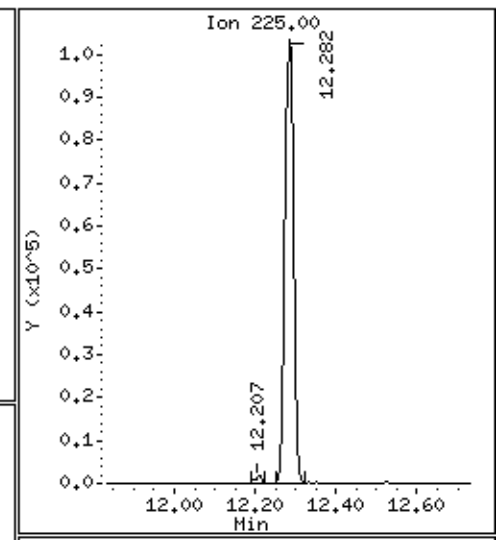
Column phase: RTX VMS 30m

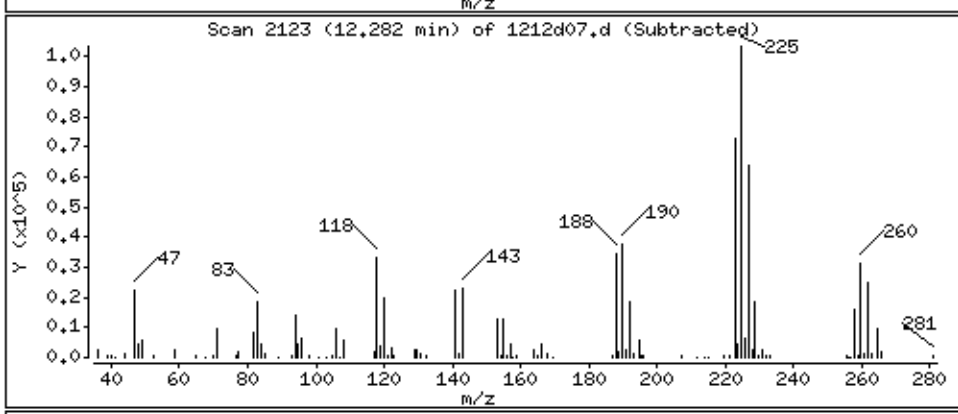
Column diameter: 0.25

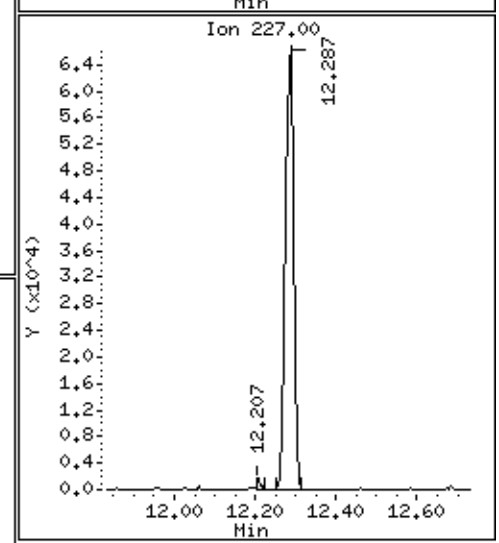
91 Hexachloro-1,3-butadiene

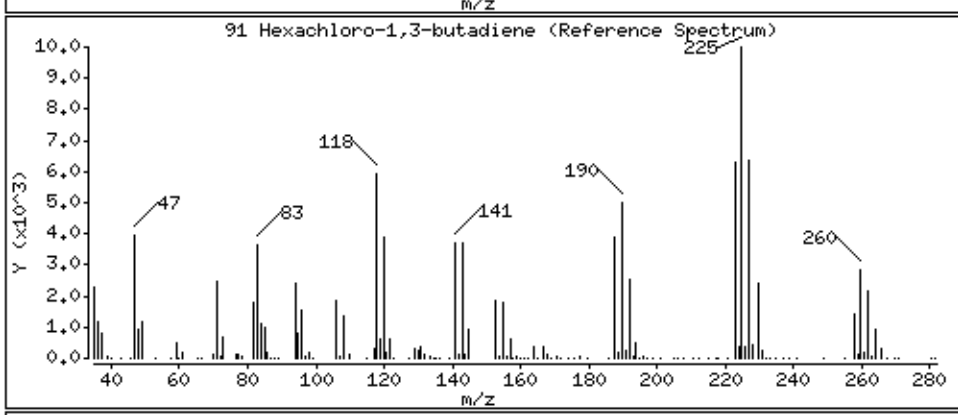
Concentration: 46.7 ug/L

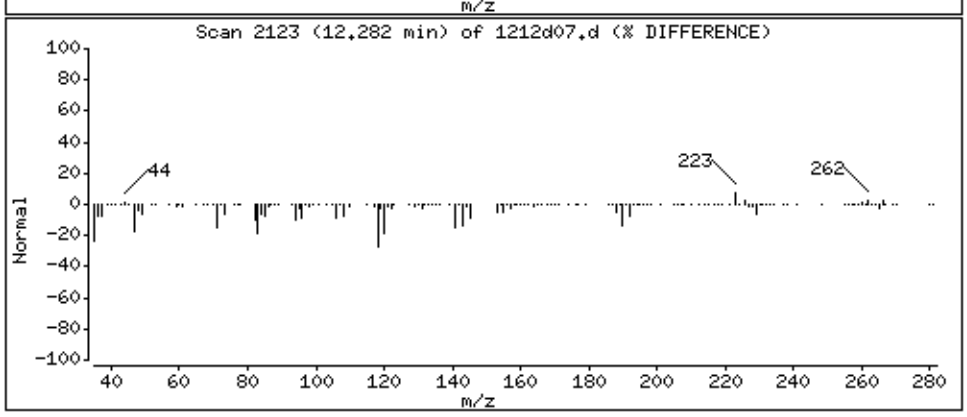












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

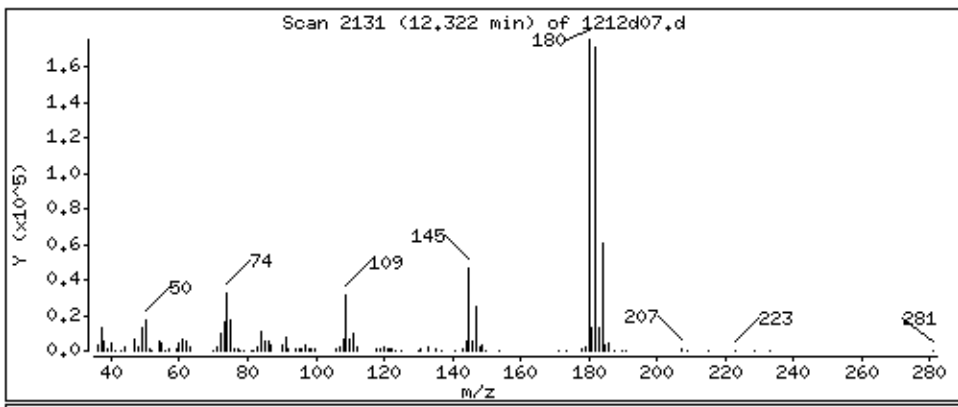
Operator: GEM

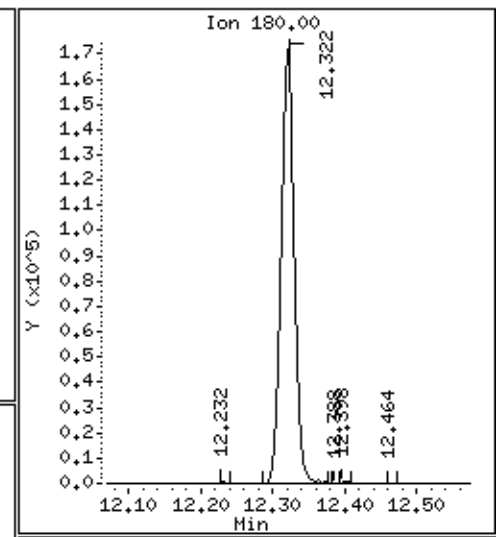
Column phase: RTX VMS 30m

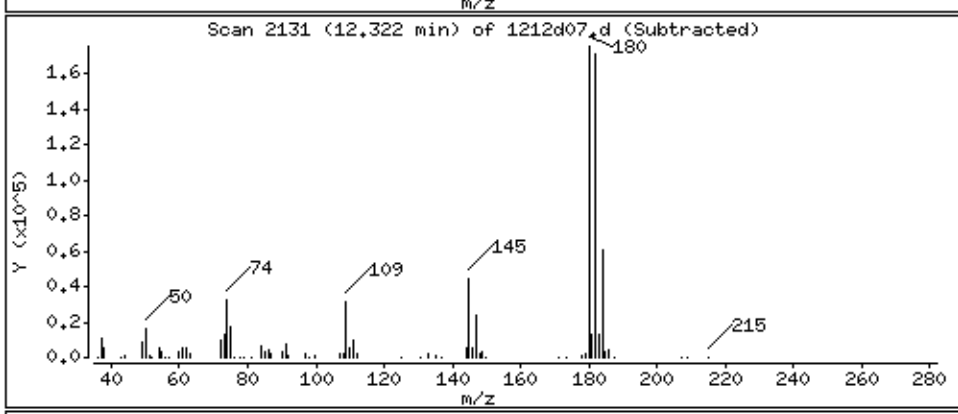
Column diameter: 0.25

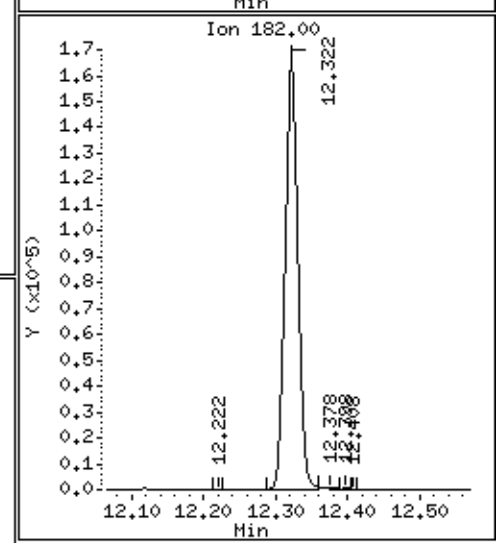
92 1,2,4-Trichlorobenzene

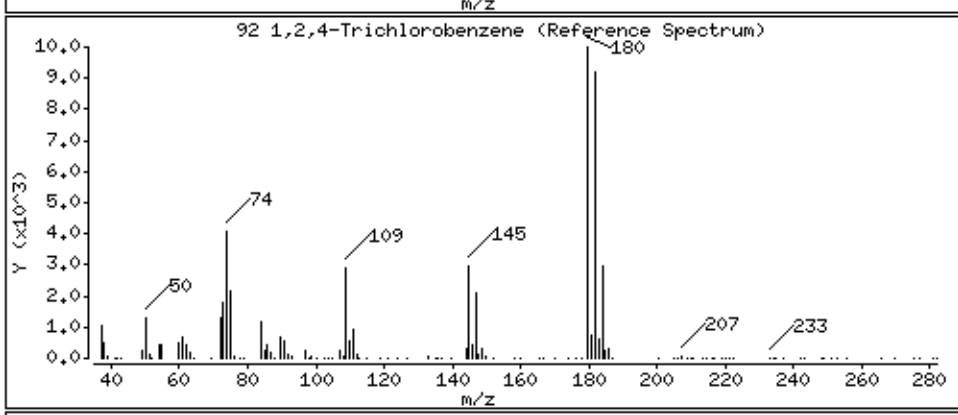
Concentration: 44.2 ug/L

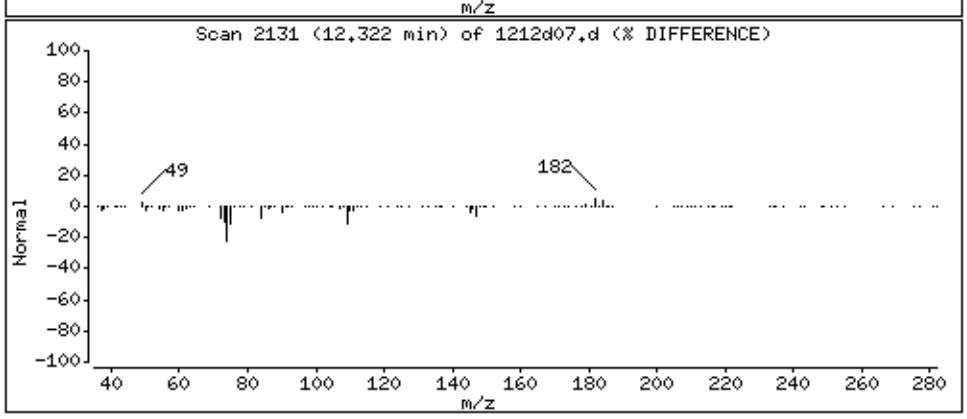












Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

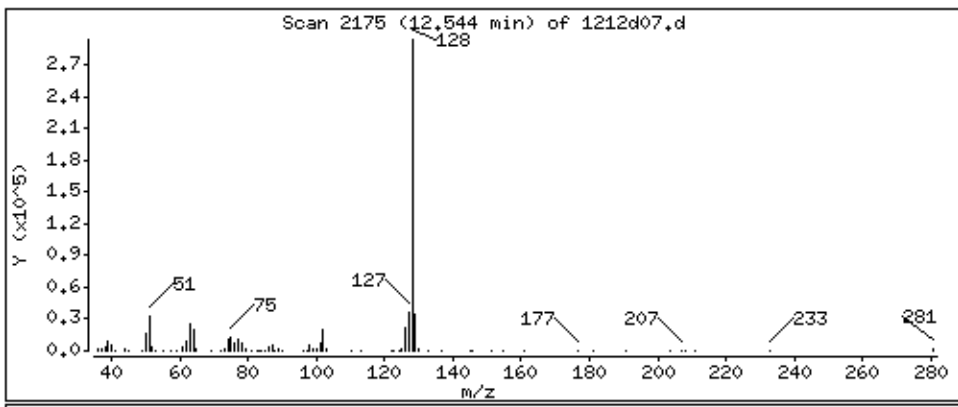
Operator: GEM

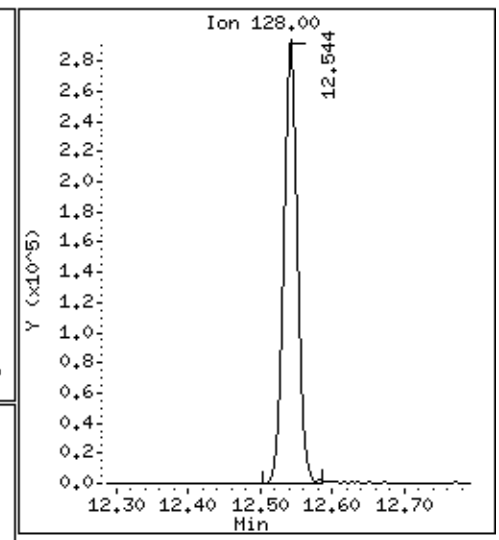
Column phase: RTX VMS 30m

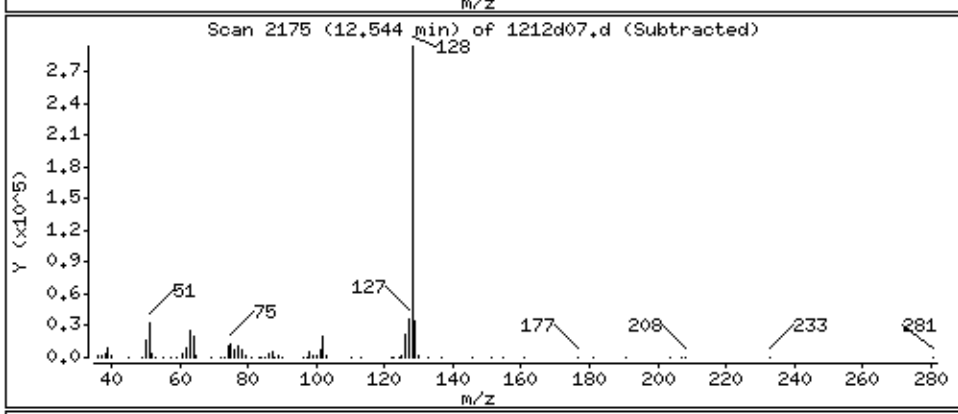
Column diameter: 0.25

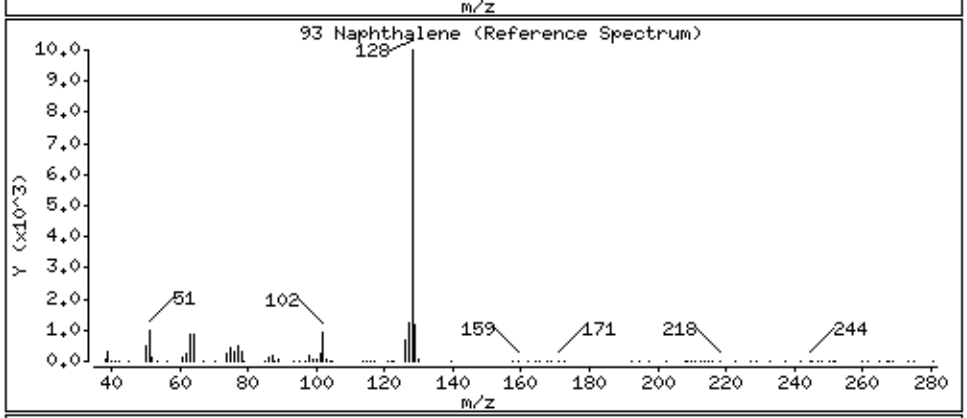
93 Naphthalene

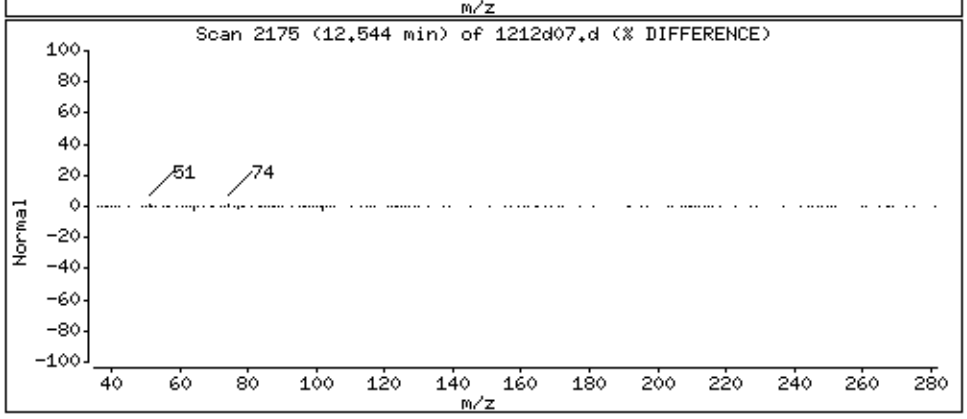
Concentration: 47.9 ug/L











Data File: \\v20winTarget\chem\20msvd.i\121217.b\1212d07.d

Date : 12-DEC-2017 10:33

Client ID: MBLCS

Instrument: 20msvd.i

Sample Info: 415095,SPK

Purge Volume: 5.0

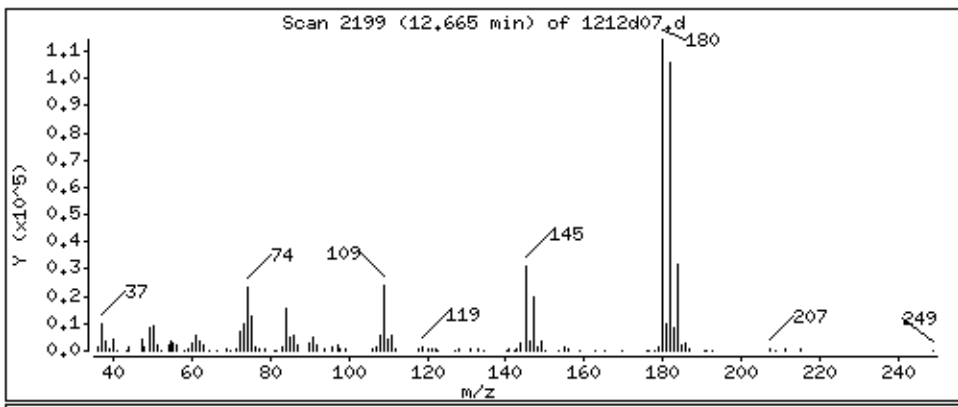
Operator: GEM

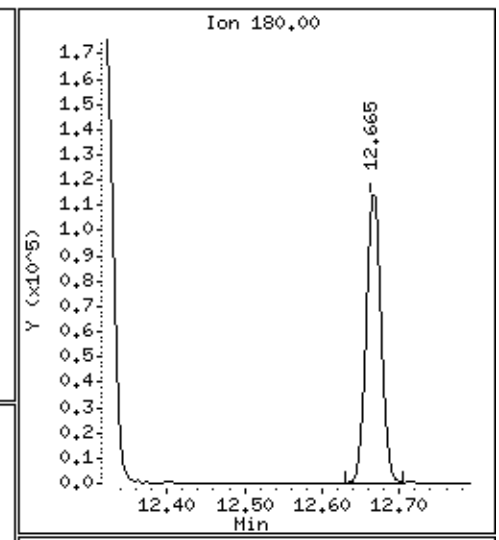
Column phase: RTX VMS 30m

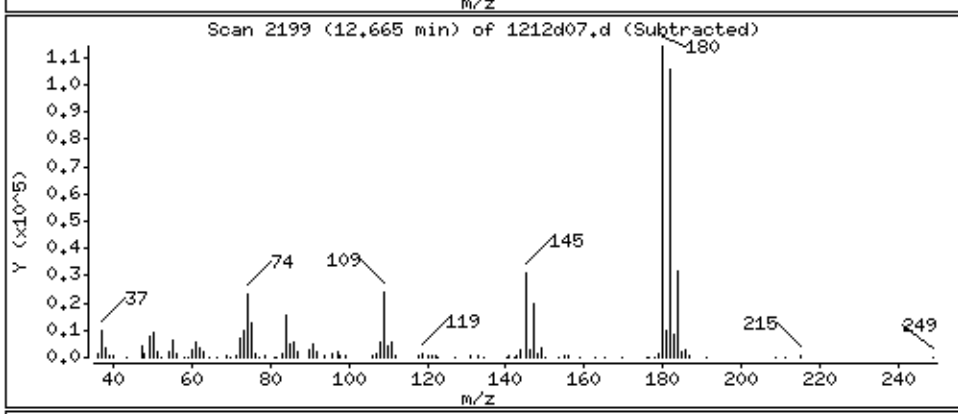
Column diameter: 0.25

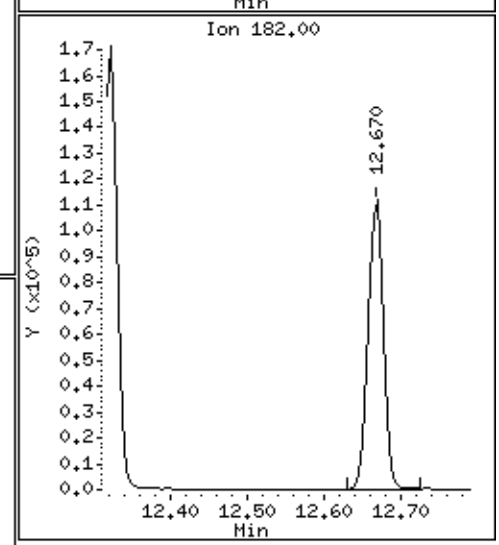
94 1,2,3-Trichlorobenzene

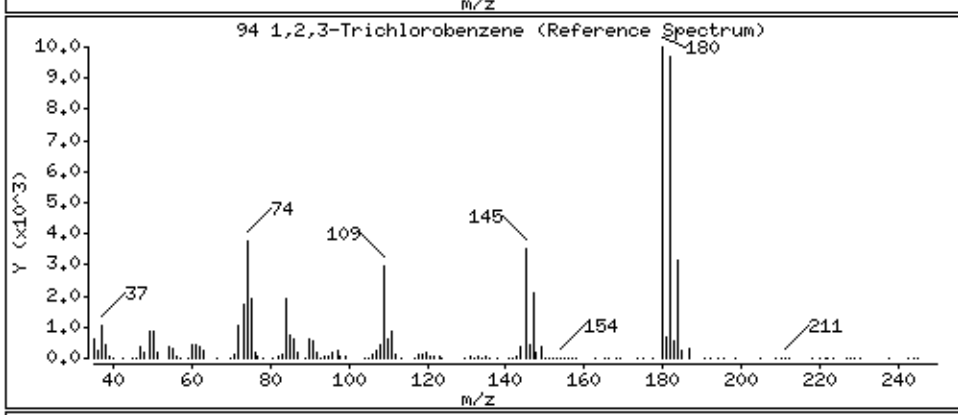
Concentration: 44.3 ug/L

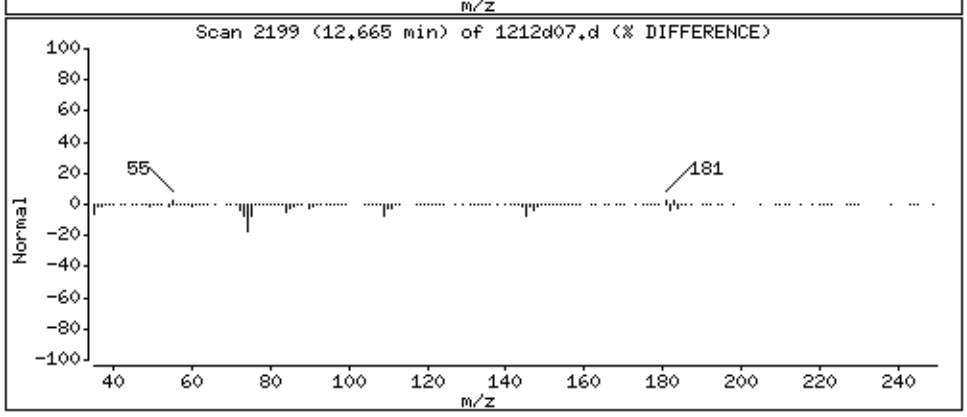






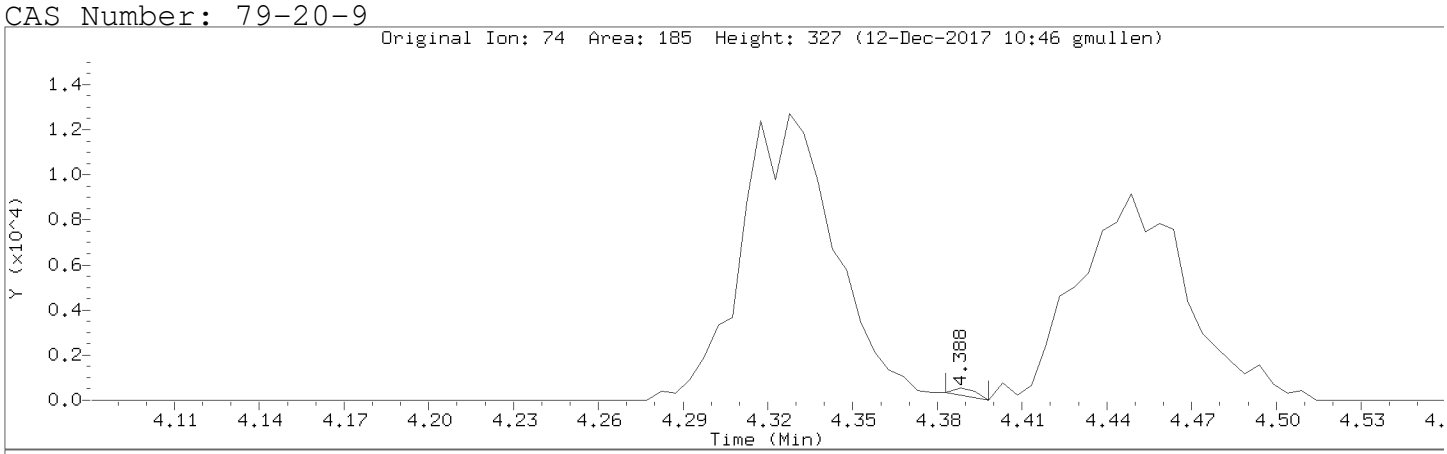


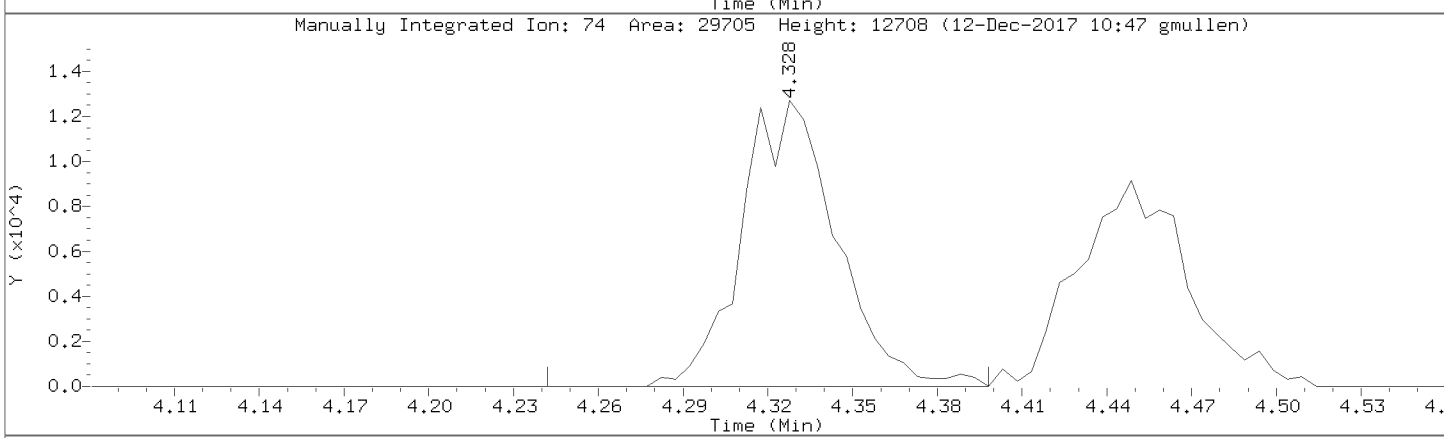


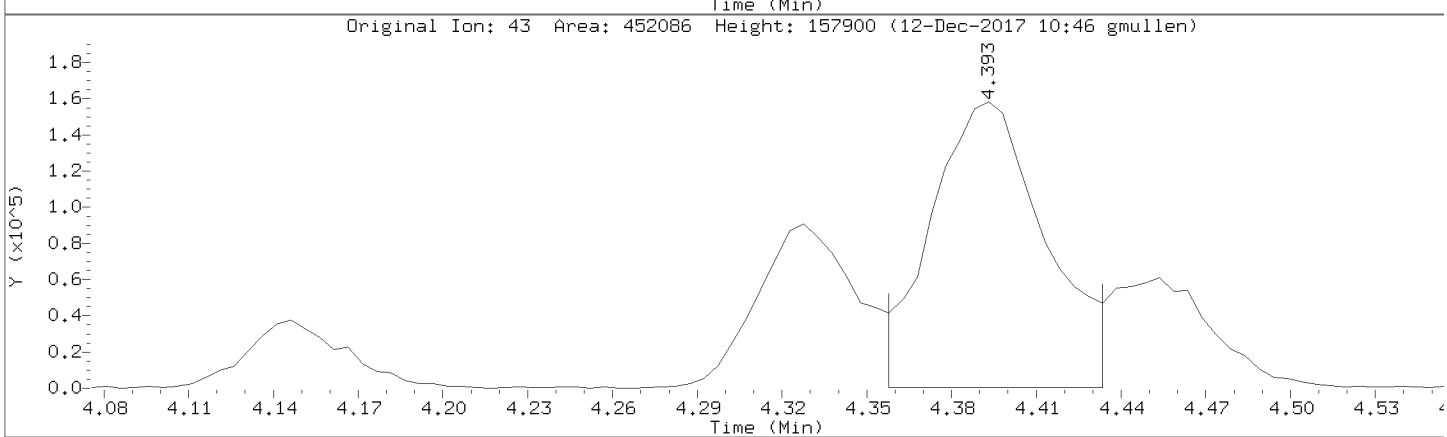


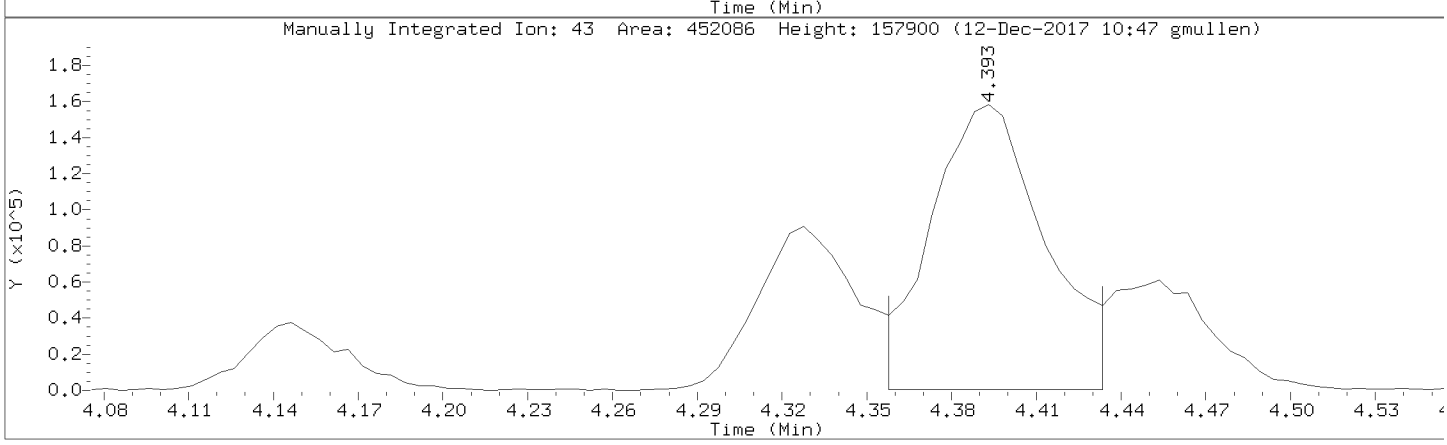
Macro: manintprepostrev.mac
Data File: \\v20winTarget\chem\20msvd.i\121217.b/1212d07.d
Injection Date: 12-DEC-2017 10:33
Instrument: 20msvd.i
Lab Sample ID: 415095

Compound: Methyl Acetate Review Code: LT
CAS Number: 79-20-9









Inst D
11-17-17

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 20msvd.i
Column RTX VMS 30m 30m X 0.25mm Helium Method: SW846 8260
Misc. Prep Info [L]:
ISTD lot: 22953:-1 Surr. lot: 53090:5
Tune std: _____ Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1117d03bfb.d	BFB_TUNE,35766:1	L/7777	BFB	1	7	bfb	11/17/17	08:53	GEM	
1/1117d04.d	CAL8,54404:1	L/7777	CALIB_8	1	< 2	d111717sim	11/17/17	09:11	GEM	
1/1117d05.d	CAL1,54397:1	L/7777	CALIB_1	1	< 2	d111717sim	11/17/17	09:29	GEM	
1/1117d06.d	CAL2,54398:1	L/7777	CALIB_2	1	< 2	d111717sim	11/17/17	09:47	GEM	
1/1117d07.d	CAL3,54399:1	L/7777	CALIB_3	1	< 2	d111717sim	11/17/17	10:05	GEM	
1/1117d08.d	CAL4,54400:1	L/7777	CALIB_4	1	< 2	d111717sim	11/17/17	10:23	GEM	
1/1117d09.d	CAL5,54401:1	L/7777	CALIB_5	1	< 2	d111717sim	11/17/17	10:41	GEM	
1/1117d10.d	CAL6,54402:1	L/7777	CALIB_6	1	< 2	d111717sim	11/17/17	10:59	GEM	
1/1117d11.d	CAL7,54403:1	L/7777	CALIB_7	1	< 2	d111717sim	11/17/17	11:16	GEM	
1/1117d13.d	ICV,54405:1	L/7777	CCALIB_5	1	< 2	d111717sim	11/17/17	12:39	GEM	1,1-DCE failed. Opened new MSVC
1/1117d15.d	ICV,54405:1	L/7777	CCALIB_5	1	< 2	d111717sim	11/17/17	13:24	GEM	
1/1117d17.d	406434,BLK	L/7761	BLANK	1	< 2	d111717sim	11/17/17	14:13	GEM	
1/1117d17b.d	408096,BLK	L/7786	BLANK	1	< 2	d111717sim	11/17/17	14:13	GEM	
1/1117d18.d	406435,SPK	L/7761	LCS	1	< 2	d111717sim	11/17/17	14:31	GEM	
1/1117d18b.d	408097,SPK	L/7786	LCS	1	< 2	d111717sim	11/17/17	14:31	GEM	
1/1117d20.d	2065056021	L/7761	SAMPLE	1	< 2	d111717sim	11/17/17	15:07	GEM	
1/1117d21.d	2065056022	L/7761	SAMPLE	1	< 2	d111717sim	11/17/17	15:25	GEM	
1/1117d22.d	2065056023	L/7761	SAMPLE	1	< 2	d111717sim	11/17/17	15:43	GEM	
1/1117d23.d	2065056024	L/7761	SAMPLE	1	< 2	d111717sim	11/17/17	16:01	GEM	
1/1117d24.d	2065056025	L/7761	SAMPLE	1	< 2	d111717sim	11/17/17	16:19	GEM	
1/1117d25.d	2065056026	L/7761	SAMPLE	1	< 2	d111717sim	11/17/17	16:37	GEM	
1/1117d26.d	2065056027	L/7761	SAMPLE	1	< 2	d111717sim	11/17/17	16:54	GEM	
1/1117d27.d	2065009002X5	L/7761	SAMPLE	5	< 2	d111717sim	11/17/17	17:12	GEM	D3. Acetone high; Nontarget
1/1117d28.d	2065335038	L/7786	SAMPLE	1	< 2	d111717sim	11/17/17	17:30	GEM	
1/1117d29.d	2065335037	L/7786	SAMPLE	1	< 2	d111717sim	11/17/17	17:48	GEM	
1/1117d30.d	2065335039	L/7786	SAMPLE	1	< 2	d111717sim	11/17/17	18:06	GEM	
1/1117d31.d	2065335040	L/7786	SAMPLE	1	< 2	d111717sim	11/17/17	18:24	GEM	
1/1117d32.d	2065335045	L/7786	SAMPLE	1	< 2	d111717sim	11/17/17	18:42	GEM	
1/1117d33.d	2065335036X200	L/7786	SAMPLE	200	< 2	d111717sim	11/17/17	19:00	GEM	DL 1:50-OD
1/1117d34.d	2065335041X5	L/7786	SAMPLE	5	< 2	d111717sim	11/17/17	19:17	GEM	DL 1:10 BT
1/1117d35.d	2065335042X5	L/7786	SAMPLE	5	< 2	d111717sim	11/17/17	19:35	GEM	RR 1:5 B c/o
1/1117d36.d	2065335043X100	L/7786	SAMPLE	100	< 2	d111717sim	11/17/17	19:53	GEM	DL 1:25-OD, B c/o
1/1117d37.d	2065335044X5	L/7786	SAMPLE	5	< 2	d111717sim	11/17/17	20:11	GEM	RR 1:1-OD
1/1117d38.d	408098,MS	L/7786	MS	1	< 2	d111717sim	11/17/17	20:28	GEM	

Check Maintenance Items Performed:

___ Changed septum ___ Clipped column ___ Changed column (lot #_____)
___ Cleaned liner ___ Changed trap (lot #_____) ___ Other minor parts replaced _____
___ Replaced/Cleaned gold seal ___ Cleaned MS source ___ No maintenance performed today

Additional Comments:

Run Order Verified: GEM CCV ✓ Paperless ✓

File Path 1: \\v20winTarget\chem\20msvd.i\111717.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 08:45 11/20/2017

Reviewed By/Date: 11/20/17 Page: 1 of 2

INSTRUMENT RUN LOG

Pace Analytical Services, Inc.

Instrument: 20msvd.i

Column RTX VMS 30m 30m X 0.25mm Helium Method: SW846 8260

Misc. Prep Info [L]:

ISTD lot: 22953:-1 Surr. lot: 53090:5

Tune std: _____ Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1117d39.d	408099,MSD	L/7786	MSD	1	< 2	d111717sim	11/17/17	20:46	GEM	
								20:53		

File Path 1: \\v20winTarget\chem\20msvd.i\111717.b

Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one

Report Date: 08:45 11/20/2017

Reviewed By/Date: _____ Page: 2 of 2

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 20msvd.i
Column DB-624 20m X 0.18mm Helium
Misc. Prep Info [L]:
ISTD lot: 22953:-1
Tune std: _____

Method: SW846 8260

Surr. lot: 53090:5
Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1117d03bfb.d	BFB_TUNE,35766:1	L/7782	BFB	1	7	bfb	11/17/17	08:53	GEM	
1/1117d05.d	CAL1,54436:1	L/7782	CALIB_1	1	< 2	d111717halo	11/17/17	09:29	GEM	
1/1117d06.d	CAL2,54437:1	L/7782	CALIB_2	1	< 2	d111717halo	11/17/17	09:47	GEM	
1/1117d07.d	CAL3,54438:1	L/7782	CALIB_3	1	< 2	d111717halo	11/17/17	10:05	GEM	
1/1117d08.d	CAL4,54439:1	L/7782	CALIB_4	1	< 2	d111717halo	11/17/17	10:23	GEM	
1/1117d09.d	CAL5,54440:1	L/7782	CALIB_5	1	< 2	d111717halo	11/17/17	10:41	GEM	
1/1117d10.d	CAL6,54441:1	L/7782	CALIB_6	1	< 2	d111717halo	11/17/17	10:59	GEM	
1/1117d11.d	CAL7,54442:1	L/7782	CALIB_7	1	< 2	d111717halo	11/17/17	11:16	GEM	
1/1117d13.d	ICV,54443:1	L/7782	CCALIB_5	1	< 2	d111717halo	11/17/17	12:39	GEM	

Check Maintenance Items Performed:

___ Changed septum
___ Cleaned liner
___ Replaced/Cleaned gold seal
___ Clipped column
___ Changed trap (lot #_____)
___ Cleaned MS source
___ Changed column (lot #_____)
___ Other minor parts replaced _____
___ No maintenance performed today

Additional Comments:

Run Order Verified: GEM

✓QBatch ✓paperless

File Path 1: \\v20winTarget\chem\20msvd.i\111717ha.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 14:23 11/17/2017

Reviewed By/Date: _____ Page: 1 of 1

Inst D
12-4-17

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 20msvd.i
Column RTX VMS 30m 30m X 0.25mm Helium Method: SW846 8260
Misc. Prep Info [L]:
ISTD lot: 22953:-1 Surr. lot: 53090:5
Tune std: _____ Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1204d05.d	VCSTD50-CCV,5490	L/7777		1	< 2	d111717sim	12/04/17	10:05	GEM	Decided to recurve b/c drift
1/1204d06bfb.d	BFB_TUNE,35766:1	L/7846	BFB	1	7	bfb	12/04/17	10:22	GEM	
1/1204d07.d	FLUSH	L/		1	< 2	d111717sim	12/04/17	10:40	GEM	
1/1204d08.d	CAL8,54934:1	L/7846	CALIB_8	1	< 2	d120417sim	12/04/17	10:58	GEM	
1/1204d09.d	CAL1,54927:1	L/7846	CALIB_1	1	< 2	d120417sim	12/04/17	11:16	GEM	
1/1204d10.d	CAL2,54928:1	L/7846	CALIB_2	1	< 2	d120417sim	12/04/17	11:34	GEM	
1/1204d11.d	CAL3,54929:1	L/7846	CALIB_3	1	< 2	d120417sim	12/04/17	11:51	GEM	
1/1204d12.d	CAL4,54930:1	L/7846	CALIB_4	1	< 2	d120417sim	12/04/17	12:09	GEM	
1/1204d13.d	CAL5,54931:1	L/7846	CALIB_5	1	< 2	d120417sim	12/04/17	12:27	GEM	
1/1204d14.d	CAL6,54932:1	L/7846	CALIB_6	1	< 2	d120417sim	12/04/17	12:44	GEM	
1/1204d15.d	CAL7,54933:1	L/7846	CALIB_7	1	< 2	d120417sim	12/04/17	13:02	GEM	
1/1204d17.d	CAL6,54932:1	L/7846	CALIB_6	1	< 2	d120417sim	12/04/17	14:36	GEM	Didn't use reruns
1/1204d18.d	CAL7,54933:1	L/7846	CALIB_7	1	< 2	d120417sim	12/04/17	14:54	GEM	for Cal 6, 7
1/1204d20.d	ICV,54935:1	L/7846	CCALIB_5	1	< 2	d120417sim	12/04/17	15:32	GEM	
1/1204d23.d	412213,BLK	L/7845	BLANK	1	< 2	d120417sim	12/04/17	16:25	GEM	$MeCl_2$ > RL
1/1204d24.d	412214,SPK	L/7845	LCS	1	< 2	d120417sim	12/04/17	16:43	GEM	
1/1204d25.d	412215,MS	L/7845	MS	1	< 2	d120417sim	12/04/17	17:00	GEM	
1/1204d26.d	412216,MSD	L/7845	MSD	1	< 2	d120417sim	12/04/17	17:17	GEM	
1/1204d28.d	2066110001	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	17:53	GEM	B
1/1204d29.d	2066110010	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	18:11	GEM	
1/1204d30.d	2066110002	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	18:29	GEM	B
1/1204d31.d	2066110003	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	18:46	GEM	B
1/1204d32.d	2066110004	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	19:04	GEM	
1/1204d33.d	2066110005	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	19:22	GEM	
1/1204d34.d	2066110006	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	19:40	GEM	B
1/1204d35.d	2066110007	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	19:57	GEM	B
1/1204d36.d	2066110008	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	20:15	GEM	
1/1204d37.d	2066110009	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	20:33	GEM	
1/1204d38.d	2066110011	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	20:51	GEM	
1/1204d39.d	2066110012	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	21:09	GEM	
1/1204d40.d	2066110013	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	21:27	GEM	
1/1204d41.d	2066110014	L/7845	SAMPLE	1	< 2	d120417sim	12/04/17	21:45	GEM	RR 1:1 - Vial broke

22:22

Check Maintenance Items Performed:

___ Changed septum ___ Clipped column ___ Changed column (lot #_____)
___ Cleaned liner ___ Changed trap (lot #_____) ___ Other minor parts replaced _____
___ Replaced/Cleaned gold seal ___ Cleaned MS source ___ No maintenance performed today

Additional Comments: Batch Paperless

Run Order Verified: _____

File Path 1: \\v20winTarget\chem\20msvd.i\120417.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 08:56 12/05/2017

Reviewed By/Date: 12/6/17 Page: 1 of 1

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 20msvd.i
Column DB-624 20m X 0.18mm Helium
Misc. Prep Info [L]:
ISTD lot: 22953:-1
Tune std: _____

Method: SW846 8260

Surr. lot: 53090:5
Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1204d05.d	HASTD50-CCV,5086	L/7782	CCALIB_5	1	< 2	d111717halo	12/04/17	10:05	GEM	Not used-curved for VC
1/1204d21.d	HASTD50-CCV,5086	L/7782	CCALIB_5	1	< 2	d111717halo	12/04/17	15:49	GEM	✓
1/1204d23.d	412213,BLK	L/7845	BLANK	1	< 2	d111717halo	12/04/17	16:25	GEM	✓
1/1204d24.d	412214,SPK	L/7845	LCS	1	< 2	d111717halo	12/04/17	16:43	GEM	✓
1/1204d25.d	412215,MS	L/7845	MS	1	< 2	d111717halo	12/04/17	17:00	GEM	✓
1/1204d26.d	412216,MSD	L/7845	MSD	1	< 2	d111717halo	12/04/17	17:17	GEM	✓
1/1204d28.d	2066110001	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	17:53	GEM	✓
1/1204d29.d	2066110010	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	18:11	GEM	✓
1/1204d30.d	2066110002	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	18:29	GEM	✓
1/1204d31.d	2066110003	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	18:46	GEM	✓
1/1204d32.d	2066110004	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	19:04	GEM	✓
1/1204d33.d	2066110005	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	19:22	GEM	✓
1/1204d34.d	2066110006	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	19:40	GEM	✓
1/1204d35.d	2066110007	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	19:57	GEM	✓
1/1204d36.d	2066110008	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	20:15	GEM	✓
1/1204d37.d	2066110009	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	20:33	GEM	✓
1/1204d38.d	2066110011	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	20:51	GEM	✓
1/1204d39.d	2066110012	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	21:09	GEM	✓
1/1204d40.d	2066110013	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	21:27	GEM	✓
1/1204d41.d	2066110014	L/7845	SAMPLE	1	< 2	d111717halo	12/04/17	21:45	GEM	RR 1:1-Vial broke

Check Maintenance Items Performed:

___ Changed septum
___ Cleaned liner
___ Replaced/Cleaned gold seal
___ Clipped column
___ Changed trap (lot #_____)
___ Cleaned MS source
___ Changed column (lot #_____)
___ Other minor parts replaced _____
___ No maintenance performed today

Additional Comments:

Run Order Verified: GEM

CCY Paperless

File Path 1: \\v20winTarget\chem\20msvd.i\120417ha.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 08:54 12/05/2017

Reviewed By/Date: _____ Page: 1 of 1

Inst D
12-12-17

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 20msvd.i
Column RTX VMS 30m 30m X 0.25mm Helium Method: SW846 8260
Misc. Prep Info [L]:
ISTD lot: 22953:-1 Surr. lot: 53090:5
Tune std: _____ Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1212d04.d	VCSTD50-CCV,5490	L/7846	CCALIB_5	1	< 2	d120417sim	12/12/17	09:40	GEM	
1/1212d04bfb.d	BFB_TUNE,35766:1	L/7846	BFB	1	7	bfb	12/12/17	09:40	GEM	
1/1212d06.d	415094,BLK	L/7883	BLANK	1	< 2	d120417sim	12/12/17	10:15	GEM	
1/1212d07.d	415095,SPK	L/7883	LCS	1	< 2	d120417sim	12/12/17	10:33	GEM	
1/1212d08.d	415096,MS	L/7883	MS	1	< 2	d120417sim	12/12/17	10:50	GEM	
1/1212d09.d	415097,MSD	L/7883	MSD	1	< 2	d120417sim	12/12/17	11:07	GEM	
1/1212d11.d	2066643003	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	11:43	GEM	
1/1212d12.d	2066643001	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	12:01	GEM	
1/1212d13.d	2066643002	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	12:18	GEM	
1/1212d14.d	2066643004	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	12:36	GEM	
1/1212d15.d	2066645001	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	12:54	GEM	
1/1212d16.d	2066645002	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	13:11	GEM	
1/1212d17.d	2066645003	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	13:29	GEM	
1/1212d18.d	2066645004	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	13:47	GEM	
1/1212d19.d	2066645005	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	14:05	GEM	
1/1212d20.d	2066645006	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	14:23	GEM	
1/1212d21.d	2066645007	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	14:41	GEM	
1/1212d22.d	2066645008	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	14:58	GEM	
1/1212d23.d	2066645009	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	15:16	GEM	
1/1212d24.d	2066645010	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	15:34	GEM	
1/1212d25.d	2066645011	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	15:52	GEM	
1/1212d26.d	2066645012	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	16:09	GEM	
1/1212d27.d	2066645013	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	16:27	GEM	
1/1212d28.d	2066645014	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	16:45	GEM	
1/1212d29.d	2066645015	L/7883	SAMPLE	1	< 2	d120417sim	12/12/17	17:03	GEM	
1/1212d30.d	415259,BLK	L/7889	BLANK	1	< 2	d120417sim	12/12/17	17:21	GEM	
1/1212d31.d	415260,SPK	L/7889	LCS	1	< 2	d120417sim	12/12/17	17:38	GEM	
1/1212d32.d	415261,MS	L/7889	MS	1	< 2	d120417sim	12/12/17	17:56	GEM	
1/1212d33.d	415262,MSD	L/7889	MSD	1	< 2	d120417sim	12/12/17	18:13	GEM	
1/1212d34.d	FLUSH	L/	SAMPLE	1	< 2	d120417sim	12/12/17	18:31	GEM	
1/1212d35.d	2066640001	L/7889	SAMPLE	1	< 2	d120417sim	12/12/17	18:48	GEM	
1/1212d36.d	2066694001	L/7889	SAMPLE	1	< 2	d120417sim	12/12/17	19:06	GEM	
1/1212d37.d	2066697001	L/7889	SAMPLE	1	< 2	d120417sim	12/12/17	19:24	GEM	
1/1212d38.d	2066697002	L/7889	SAMPLE	1	< 2	d120417sim	12/12/17	19:42	GEM	

Check Maintenance Items Performed:

___ Changed septum
___ Cleaned liner
___ Replaced/Cleaned gold seal
___ Clipped column
___ Changed trap (lot #_____)
___ Cleaned MS source
___ Changed column (lot #_____)
___ Other minor parts replaced _____
___ No maintenance performed today

Additional Comments:

Run Order Verified: GEM VCCV Paperless

File Path 1: \\v20winTarget\chem\20msvd.i\121217.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 08:27 12/13/2017

Reviewed By/Date: 12/13/17 Page: 1 of 2

INSTRUMENT RUN LOG

Pace Analytical Services, Inc.

Instrument: 20msvd.i

Column RTX VMS 30m 30m X 0.25mm Helium Method: SW846 8260

Misc. Prep Info [L]:

ISTD lot: 22953:-1 Surr. lot: 53090:5

Tune std: _____ Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1212d39.d	2066683001	L/7889	SAMPLE	1	< 2	d120417sim	12/12/17	20:00	GEM	
1/1212d40.d	2066738001	L/7889	SAMPLE	1	< 2	d120417sim	12/12/17	20:17	GEM	

21:40

File Path 1: \\v20winTarget\chem\20msvd.i\121217.b

Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one

Report Date: 08:27 12/13/2017

Reviewed By/Date: _____ Page: 2 of 2

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 20msvd.i
Column DB-624 20m X 0.18mm Helium
Misc. Prep Info [L]:
ISTD lot: 22953:-1
Tune std: _____

Method: SW846 8260

Surr. lot: 53090:5
Cal. std: _____

Instrument name..... 20MSVD

Path/File	Lab ID	Mtrx/Batch	Type	DF	pH	Method	Date	Time	Oper	Comments
1/1212d04.d	HASTD50-CCV,5086	L/7782	CCALIB_5	1	< 2	d111717halo	12/12/17	09:40	GEM	
1/1212d06.d	415094,BLK	L/7883	BLANK	1	< 2	d111717halo	12/12/17	10:15	GEM	
1/1212d07.d	415095,SPK	L/7883	LCS	1	< 2	d111717halo	12/12/17	10:33	GEM	
1/1212d08.d	415096,MS	L/7883	MS	1	< 2	d111717halo	12/12/17	10:50	GEM	
1/1212d09.d	415097,MSD	L/7883	MSD	1	< 2	d111717halo	12/12/17	11:07	GEM	
1/1212d11.d	2066643003	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	11:43	GEM	
1/1212d12.d	2066643001	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	12:01	GEM	
1/1212d13.d	2066643002	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	12:18	GEM	
1/1212d14.d	2066643004	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	12:36	GEM	
1/1212d15.d	2066645001	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	12:54	GEM	
1/1212d16.d	2066645002	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	13:11	GEM	
1/1212d17.d	2066645003	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	13:29	GEM	
1/1212d18.d	2066645004	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	13:47	GEM	
1/1212d19.d	2066645005	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	14:05	GEM	
1/1212d20.d	2066645006	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	14:23	GEM	
1/1212d21.d	2066645007	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	14:41	GEM	
1/1212d22.d	2066645008	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	14:58	GEM	
1/1212d23.d	2066645009	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	15:16	GEM	
1/1212d24.d	2066645010	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	15:34	GEM	
1/1212d25.d	2066645011	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	15:52	GEM	
1/1212d26.d	2066645012	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	16:09	GEM	
1/1212d27.d	2066645013	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	16:27	GEM	
1/1212d28.d	2066645014	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	16:45	GEM	
1/1212d29.d	2066645015	L/7883	SAMPLE	1	< 2	d111717halo	12/12/17	17:03	GEM	

Check Maintenance Items Performed:

___ Changed septum
___ Cleaned liner
___ Replaced/Cleaned gold seal
___ Clipped column
___ Changed trap (lot #_____)
___ Cleaned MS source
___ Changed column (lot #_____)
___ Other minor parts replaced _____
___ No maintenance performed today

Additional Comments: VCCV Paperless

Run Order Verified: GM

File Path 1: \\v20winTarget\chem\20msvd.i\121217ha.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 08:26 12/13/2017

Reviewed By/Date: _____ Page: 1 of 1

Standard Log Report

Standards Log Information for Standard #54935

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	5 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/26/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-ICV

Notes:

MSV 8260 Level 5 Calibration STD @ 50 ug/L

Compound Name and Concentration for Standard #54935

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/L	1,1,1-Trichloroethane	50 ug/L
1,1,2,2-Tetrachloroethane	50 ug/L	1,1,2-Trichloroethane	50 ug/L
1,1,2-	50 ug/L	1,1-Dichloroethane	50 ug/L
1,1-Dichloroethene	50 ug/L	1,1-Dichloropropene	50 ug/L
1,2,3-Trichlorobenzene	50 ug/L	1,2,3-Trichloropropane	50 ug/L
1,2,4-Trichlorobenzene	50 ug/L	1,2,4-Trimethylbenzene	50 ug/L
1,2-Dibromo-3-	50 ug/L	1,2-Dibromoethane (EDB)	50 ug/L
1,2-Dichlorobenzene	50 ug/L	1,2-Dichloroethane	50 ug/L
1,2-Dichloropropane	50 ug/L	1,3,5-Trimethylbenzene	50 ug/L
1,3-Dichlorobenzene	50 ug/L	1,3-Dichloropropane	50 ug/L
1,4-Dichlorobenzene	50 ug/L	1,4-Dioxane (p-Dioxane)	1000 ug/L
2,2-Dichloropropane	50 ug/L	2-Bromo-1-chloropropane	50 ug/L
2-Butanone (MEK)	50 ug/L	2-Chloroethanol	50 ug/L
2-Chloroethylvinyl ether	100 ug/L	2-Chlorotoluene	50 ug/L
2-Hexanone	50 ug/L	4-Chlorotoluene	50 ug/L
4-Methyl-2-pentanone	50 ug/L	Acetone	50 ug/L
Acetonitrile	500 ug/L	Acrolein	50 ug/L
Acrylonitrile	50 ug/L	Allyl chloride	50 ug/L
Benzene	50 ug/L	Bromobenzene	50 ug/L
Bromochloromethane	50 ug/L	Bromodichloromethane	50 ug/L
Bromoform	50 ug/L	Bromomethane	50 ug/L
Carbon disulfide	50 ug/L	Carbon tetrachloride	50 ug/L
Chlorobenzene	50 ug/L	Chloroethane	50 ug/L
Chloroform	50 ug/L	Chloromethane	50 ug/L
Chloroprene	50 ug/L	Cyclohexane	50 ug/L
DI Water	ug/L	Dibromochloromethane	50 ug/L
Dibromomethane	50 ug/L	Dichlorodifluoromethane	50 ug/L
Ethyl methacrylate	50 ug/L	Ethylbenzene	50 ug/L
Hexachloro-1,3-butadiene	50 ug/L	Iodomethane	50 ug/L
Isobutanol	1050 ug/L	Isopropylbenzene (Cumene)	50 ug/L
Methacrylonitrile	500 ug/L	Methanol	ug/L
Methyl acetate	50 ug/L	Methyl acrylate	50 ug/L
Methyl methacrylate	100 ug/L	Methyl-tert-butyl ether	50 ug/L
Methylcyclohexane	50 ug/L	Methylene Chloride	50 ug/L
Naphthalene	50 ug/L	Nitrobenzene	50 ug/L
Pentachloroethane	50 ug/L	Propionitrile	500 ug/L
Styrene	50 ug/L	Tetrachloroethene	50 ug/L
Tetrahydrofuran	50 ug/L	Toluene	50 ug/L
Trichloroethene	50 ug/L	Trichlorofluoromethane	50 ug/L
Vinyl acetate	100 ug/L	Vinyl chloride	50 ug/L
Xylene (Total)	150 ug/L	cis-1,2-Dichloroethene	50 ug/L
cis-1,3-Dichloropropene	50 ug/L	cis-1,4-Dichloro-2-butene	100 ug/L
m&p-Xylene	100 ug/L	n-Butylbenzene	50 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	50 ug/L	n-Propylbenzene	50 ug/L
o-Xylene	50 ug/L	p-Isopropyltoluene	50 ug/L
sec-Butylbenzene	50 ug/L	tert-Butylbenzene	50 ug/L
trans-1,2-Dichloroethene	50 ug/L	trans-1,3-Dichloropropene	50 ug/L
trans-1,4-Dichloro-2-	100 ug/L		

Composed of Information for Standard #54935

Composed of Standard Seq	Volume	Units
54871	5	uL
54695	5	uL
47383	5	uL
10	4.98	mL

Standard Log Report

Standards Log Information for Standard #54934

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL8

Notes:

MSV 8260 Level 8 Calibration STD @ .2 ug/L

Compound Name and Concentration for Standard #54934

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	.2 ug/L	1,1,1-Trichloroethane	.2 ug/L
1,1,2,2-Tetrachloroethane	.2 ug/L	1,1,2-Trichloroethane	.2 ug/L
1,1,2-	.2 ug/L	1,1-Dichloroethane	.2 ug/L
1,1-Dichloroethene	.2 ug/L	1,1-Dichloropropene	.2 ug/L
1,2,3-Trichlorobenzene	.2 ug/L	1,2,3-Trichloropropane	.2 ug/L
1,2,4-Trichlorobenzene	.2 ug/L	1,2,4-Trimethylbenzene	.2 ug/L
1,2-Dibromo-3-	.2 ug/L	1,2-Dibromoethane (EDB)	.2 ug/L
1,2-Dichlorobenzene	.2 ug/L	1,2-Dichloroethane	.2 ug/L
1,2-Dichloropropane	.2 ug/L	1,3,5-Trimethylbenzene	.2 ug/L
1,3-Dichlorobenzene	.2 ug/L	1,3-Dichloropropane	.2 ug/L
1,4-Dichlorobenzene	.2 ug/L	1,4-Dioxane (p-Dioxane)	4 ug/L
2,2-Dichloropropane	.2 ug/L	2-Bromo-1-chloropropane	.2 ug/L
2-Butanone (MEK)	.2 ug/L	2-Chloroethanol	.2 ug/L
2-Chloroethylvinyl ether	.4 ug/L	2-Chlorotoluene	.2 ug/L
2-Hexanone	.2 ug/L	4-Chlorotoluene	.2 ug/L
4-Methyl-2-pentanone	.2 ug/L	Acetone	.2 ug/L
Acetonitrile	2 ug/L	Acrolein	.2 ug/L
Acrylonitrile	.2 ug/L	Allyl chloride	.2 ug/L
Benzene	.2 ug/L	Bromobenzene	.2 ug/L
Bromochloromethane	.2 ug/L	Bromodichloromethane	.2 ug/L
Bromoform	.2 ug/L	Bromomethane	.2 ug/L
Carbon disulfide	.2 ug/L	Carbon tetrachloride	.2 ug/L
Chlorobenzene	.2 ug/L	Chloroethane	.2 ug/L
Chloroform	.2 ug/L	Chloromethane	.2 ug/L
Chloroprene	.2 ug/L	Cyclohexane	.2 ug/L
DI Water	ug/L	Dibromochloromethane	.2 ug/L
Dibromomethane	.2 ug/L	Dichlorodifluoromethane	.2 ug/L
Ethyl methacrylate	.2 ug/L	Ethylbenzene	.2 ug/L
Hexachloro-1,3-butadiene	.2 ug/L	Iodomethane	.2 ug/L
Isobutanol	4.2 ug/L	Isopropylbenzene (Cumene)	.2 ug/L
Methacrylonitrile	2 ug/L	Methanol	ug/L
Methyl acetate	.2 ug/L	Methyl acrylate	.2 ug/L
Methyl methacrylate	.4 ug/L	Methyl-tert-butyl ether	.2 ug/L
Methylcyclohexane	.2 ug/L	Methylene Chloride	.2 ug/L
Naphthalene	.2 ug/L	Nitrobenzene	.2 ug/L
Pentachloroethane	.2 ug/L	Propionitrile	2 ug/L
Styrene	.2 ug/L	Tetrachloroethene	.2 ug/L
Tetrahydrofuran	.2 ug/L	Toluene	.2 ug/L
Trichloroethene	.2 ug/L	Trichlorofluoromethane	.2 ug/L
Vinyl acetate	.4 ug/L	Vinyl chloride	.2 ug/L
Xylene (Total)	.6 ug/L	cis-1,2-Dichloroethene	.2 ug/L
cis-1,3-Dichloropropene	.2 ug/L	cis-1,4-Dichloro-2-butene	.4 ug/L
m&p-Xylene	.4 ug/L	n-Butylbenzene	.2 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	.2 ug/L	n-Propylbenzene	.2 ug/L
o-Xylene	.2 ug/L	sec-Butylbenzene	.2 ug/L
tert-Butylbenzene	.2 ug/L	trans-1,2-Dichloroethene	.2 ug/L
trans-1,3-Dichloropropene	.2 ug/L	trans-1,4-Dichloro-2-	.4 ug/L

Composed of Information for Standard #54934

Composed of Standard Seq	Volume	Units
54870	0.2	uL
54803	0.2	uL
52845	0.2	uL
10	49.9994	mL

Standard Log Report

Standards Log Information for Standard #54933

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL7

Notes:

MSV 8260 Level 7 Calibration STD @ 200 ug/L

Compound Name and Concentration for Standard #54933

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	200 ug/L	1,1,1-Trichloroethane	200 ug/L
1,1,2,2-Tetrachloroethane	200 ug/L	1,1,2-Trichloroethane	200 ug/L
1,1,2-	200 ug/L	1,1-Dichloroethane	200 ug/L
1,1-Dichloroethene	200 ug/L	1,1-Dichloropropene	200 ug/L
1,2,3-Trichlorobenzene	200 ug/L	1,2,3-Trichloropropane	200 ug/L
1,2,4-Trichlorobenzene	200 ug/L	1,2,4-Trimethylbenzene	200 ug/L
1,2-Dibromo-3-	200 ug/L	1,2-Dibromoethane (EDB)	200 ug/L
1,2-Dichlorobenzene	200 ug/L	1,2-Dichloroethane	200 ug/L
1,2-Dichloropropane	200 ug/L	1,3,5-Trimethylbenzene	200 ug/L
1,3-Dichlorobenzene	200 ug/L	1,3-Dichloropropane	200 ug/L
1,4-Dichlorobenzene	200 ug/L	1,4-Dioxane (p-Dioxane)	4000 ug/L
2,2-Dichloropropane	200 ug/L	2-Bromo-1-chloropropane	200 ug/L
2-Butanone (MEK)	200 ug/L	2-Chloroethanol	200 ug/L
2-Chloroethylvinyl ether	400 ug/L	2-Chlorotoluene	200 ug/L
2-Hexanone	200 ug/L	4-Chlorotoluene	200 ug/L
4-Methyl-2-pentanone	200 ug/L	Acetone	200 ug/L
Acetonitrile	2000 ug/L	Acrolein	200 ug/L
Acrylonitrile	200 ug/L	Allyl chloride	200 ug/L
Benzene	200 ug/L	Bromobenzene	200 ug/L
Bromochloromethane	200 ug/L	Bromodichloromethane	200 ug/L
Bromoform	200 ug/L	Bromomethane	200 ug/L
Carbon disulfide	200 ug/L	Carbon tetrachloride	200 ug/L
Chlorobenzene	200 ug/L	Chloroethane	200 ug/L
Chloroform	200 ug/L	Chloromethane	200 ug/L
Chloroprene	200 ug/L	Cyclohexane	200 ug/L
DI Water	ug/L	Dibromochloromethane	200 ug/L
Dibromomethane	200 ug/L	Dichlorodifluoromethane	200 ug/L
Ethyl methacrylate	200 ug/L	Ethylbenzene	200 ug/L
Hexachloro-1,3-butadiene	200 ug/L	Iodomethane	200 ug/L
Isobutanol	4200 ug/L	Isopropylbenzene (Cumene)	200 ug/L
Methacrylonitrile	2000 ug/L	Methanol	ug/L
Methyl acetate	200 ug/L	Methyl acrylate	200 ug/L
Methyl methacrylate	400 ug/L	Methyl-tert-butyl ether	200 ug/L
Methylcyclohexane	200 ug/L	Methylene Chloride	200 ug/L
Naphthalene	200 ug/L	Nitrobenzene	200 ug/L
Pentachloroethane	200 ug/L	Propionitrile	2000 ug/L
Styrene	200 ug/L	Tetrachloroethene	200 ug/L
Tetrahydrofuran	200 ug/L	Toluene	200 ug/L
Trichloroethene	200 ug/L	Trichlorofluoromethane	200 ug/L
Vinyl acetate	400 ug/L	Vinyl chloride	200 ug/L
Xylene (Total)	600 ug/L	cis-1,2-Dichloroethene	200 ug/L
cis-1,3-Dichloropropene	200 ug/L	cis-1,4-Dichloro-2-butene	400 ug/L
m&p-Xylene	400 ug/L	n-Butylbenzene	200 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	200 ug/L	n-Propylbenzene	200 ug/L
o-Xylene	200 ug/L	sec-Butylbenzene	200 ug/L
tert-Butylbenzene	200 ug/L	trans-1,2-Dichloroethene	200 ug/L
trans-1,3-Dichloropropene	200 ug/L	trans-1,4-Dichloro-2-	400 ug/L

Composed of Information for Standard #54933

Composed of Standard Seq	Volume	Units
54870	200	uL
54803	200	uL
52845	200	uL
10	49.4	mL

Standard Log Report

Standards Log Information for Standard #54932

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL6

Notes:

MSV 8260 Level 6 Calibration STD @ 100 ug/L

Compound Name and Concentration for Standard #54932

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	100 ug/L	1,1,1-Trichloroethane	100 ug/L
1,1,2,2-Tetrachloroethane	100 ug/L	1,1,2-Trichloroethane	100 ug/L
1,1,2-	100 ug/L	1,1-Dichloroethane	100 ug/L
1,1-Dichloroethene	100 ug/L	1,1-Dichloropropene	100 ug/L
1,2,3-Trichlorobenzene	100 ug/L	1,2,3-Trichloropropane	100 ug/L
1,2,4-Trichlorobenzene	100 ug/L	1,2,4-Trimethylbenzene	100 ug/L
1,2-Dibromo-3-	100 ug/L	1,2-Dibromoethane (EDB)	100 ug/L
1,2-Dichlorobenzene	100 ug/L	1,2-Dichloroethane	100 ug/L
1,2-Dichloropropane	100 ug/L	1,3,5-Trimethylbenzene	100 ug/L
1,3-Dichlorobenzene	100 ug/L	1,3-Dichloropropane	100 ug/L
1,4-Dichlorobenzene	100 ug/L	1,4-Dioxane (p-Dioxane)	2000 ug/L
2,2-Dichloropropane	100 ug/L	2-Bromo-1-chloropropane	100 ug/L
2-Butanone (MEK)	100 ug/L	2-Chloroethanol	100 ug/L
2-Chloroethylvinyl ether	200 ug/L	2-Chlorotoluene	100 ug/L
2-Hexanone	100 ug/L	4-Chlorotoluene	100 ug/L
4-Methyl-2-pentanone	100 ug/L	Acetone	100 ug/L
Acetonitrile	1000 ug/L	Acrolein	100 ug/L
Acrylonitrile	100 ug/L	Allyl chloride	100 ug/L
Benzene	100 ug/L	Bromobenzene	100 ug/L
Bromochloromethane	100 ug/L	Bromodichloromethane	100 ug/L
Bromoform	100 ug/L	Bromomethane	100 ug/L
Carbon disulfide	100 ug/L	Carbon tetrachloride	100 ug/L
Chlorobenzene	100 ug/L	Chloroethane	100 ug/L
Chloroform	100 ug/L	Chloromethane	100 ug/L
Chloroprene	100 ug/L	Cyclohexane	100 ug/L
DI Water	ug/L	Dibromochloromethane	100 ug/L
Dibromomethane	100 ug/L	Dichlorodifluoromethane	100 ug/L
Ethyl methacrylate	100 ug/L	Ethylbenzene	100 ug/L
Hexachloro-1,3-butadiene	100 ug/L	Iodomethane	100 ug/L
Isobutanol	2100 ug/L	Isopropylbenzene (Cumene)	100 ug/L
Methacrylonitrile	1000 ug/L	Methanol	ug/L
Methyl acetate	100 ug/L	Methyl acrylate	100 ug/L
Methyl methacrylate	200 ug/L	Methyl-tert-butyl ether	100 ug/L
Methylcyclohexane	100 ug/L	Methylene Chloride	100 ug/L
Naphthalene	100 ug/L	Nitrobenzene	100 ug/L
Pentachloroethane	100 ug/L	Propionitrile	1000 ug/L
Styrene	100 ug/L	Tetrachloroethene	100 ug/L
Tetrahydrofuran	100 ug/L	Toluene	100 ug/L
Trichloroethene	100 ug/L	Trichlorofluoromethane	100 ug/L
Vinyl acetate	200 ug/L	Vinyl chloride	100 ug/L
Xylene (Total)	300 ug/L	cis-1,2-Dichloroethene	100 ug/L
cis-1,3-Dichloropropene	100 ug/L	cis-1,4-Dichloro-2-butene	200 ug/L
m&p-Xylene	200 ug/L	n-Butylbenzene	100 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	100 ug/L	n-Propylbenzene	100 ug/L
o-Xylene	100 ug/L	sec-Butylbenzene	100 ug/L
tert-Butylbenzene	100 ug/L	trans-1,2-Dichloroethene	100 ug/L
trans-1,3-Dichloropropene	100 ug/L	trans-1,4-Dichloro-2-	200 ug/L

Composed of Information for Standard #54932

Composed of Standard Seq	Volume	Units
54870	100	uL
54803	100	uL
52845	100	uL
10	49.7	mL

Standard Log Report

Standards Log Information for Standard #54931

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL5

Notes:

MSV 8260 Level 5 Calibration STD @ 50 ug/L

Compound Name and Concentration for Standard #54931

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/L	1,1,1-Trichloroethane	50 ug/L
1,1,2,2-Tetrachloroethane	50 ug/L	1,1,2-Trichloroethane	50 ug/L
1,1,2-	50 ug/L	1,1-Dichloroethane	50 ug/L
1,1-Dichloroethene	50 ug/L	1,1-Dichloropropene	50 ug/L
1,2,3-Trichlorobenzene	50 ug/L	1,2,3-Trichloropropane	50 ug/L
1,2,4-Trichlorobenzene	50 ug/L	1,2,4-Trimethylbenzene	50 ug/L
1,2-Dibromo-3-	50 ug/L	1,2-Dibromoethane (EDB)	50 ug/L
1,2-Dichlorobenzene	50 ug/L	1,2-Dichloroethane	50 ug/L
1,2-Dichloropropane	50 ug/L	1,3,5-Trimethylbenzene	50 ug/L
1,3-Dichlorobenzene	50 ug/L	1,3-Dichloropropane	50 ug/L
1,4-Dichlorobenzene	50 ug/L	1,4-Dioxane (p-Dioxane)	1000 ug/L
2,2-Dichloropropane	50 ug/L	2-Bromo-1-chloropropane	50 ug/L
2-Butanone (MEK)	50 ug/L	2-Chloroethanol	50 ug/L
2-Chloroethylvinyl ether	100 ug/L	2-Chlorotoluene	50 ug/L
2-Hexanone	50 ug/L	4-Chlorotoluene	50 ug/L
4-Methyl-2-pentanone	50 ug/L	Acetone	50 ug/L
Acetonitrile	500 ug/L	Acrolein	50 ug/L
Acrylonitrile	50 ug/L	Allyl chloride	50 ug/L
Benzene	50 ug/L	Bromobenzene	50 ug/L
Bromochloromethane	50 ug/L	Bromodichloromethane	50 ug/L
Bromoform	50 ug/L	Bromomethane	50 ug/L
Carbon disulfide	50 ug/L	Carbon tetrachloride	50 ug/L
Chlorobenzene	50 ug/L	Chloroethane	50 ug/L
Chloroform	50 ug/L	Chloromethane	50 ug/L
Chloroprene	50 ug/L	Cyclohexane	50 ug/L
DI Water	ug/L	Dibromochloromethane	50 ug/L
Dibromomethane	50 ug/L	Dichlorodifluoromethane	50 ug/L
Ethyl methacrylate	50 ug/L	Ethylbenzene	50 ug/L
Hexachloro-1,3-butadiene	50 ug/L	Iodomethane	50 ug/L
Isobutanol	1050 ug/L	Isopropylbenzene (Cumene)	50 ug/L
Methacrylonitrile	500 ug/L	Methanol	ug/L
Methyl acetate	50 ug/L	Methyl acrylate	50 ug/L
Methyl methacrylate	100 ug/L	Methyl-tert-butyl ether	50 ug/L
Methylcyclohexane	50 ug/L	Methylene Chloride	50 ug/L
Naphthalene	50 ug/L	Nitrobenzene	50 ug/L
Pentachloroethane	50 ug/L	Propionitrile	500 ug/L
Styrene	50 ug/L	Tetrachloroethene	50 ug/L
Tetrahydrofuran	50 ug/L	Toluene	50 ug/L
Trichloroethene	50 ug/L	Trichlorofluoromethane	50 ug/L
Vinyl acetate	100 ug/L	Vinyl chloride	50 ug/L
Xylene (Total)	150 ug/L	cis-1,2-Dichloroethene	50 ug/L
cis-1,3-Dichloropropene	50 ug/L	cis-1,4-Dichloro-2-butene	100 ug/L
m&p-Xylene	100 ug/L	n-Butylbenzene	50 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	50 ug/L	n-Propylbenzene	50 ug/L
o-Xylene	50 ug/L	sec-Butylbenzene	50 ug/L
tert-Butylbenzene	50 ug/L	trans-1,2-Dichloroethene	50 ug/L
trans-1,3-Dichloropropene	50 ug/L	trans-1,4-Dichloro-2-	100 ug/L

Composed of Information for Standard #54931

Composed of Standard Seq	Volume	Units
54870	50	uL
54803	50	uL
52845	50	uL
10	49.85	mL

Standard Log Report

Standards Log Information for Standard #54930

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL4

Notes:

MSV 8260 Level 4 Calibration STD @ 20 ug/L

Compound Name and Concentration for Standard #54930

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	20 ug/L	1,1,1-Trichloroethane	20 ug/L
1,1,2,2-Tetrachloroethane	20 ug/L	1,1,2-Trichloroethane	20 ug/L
1,1,2-	20 ug/L	1,1-Dichloroethane	20 ug/L
1,1-Dichloroethene	20 ug/L	1,1-Dichloropropene	20 ug/L
1,2,3-Trichlorobenzene	20 ug/L	1,2,3-Trichloropropane	20 ug/L
1,2,4-Trichlorobenzene	20 ug/L	1,2,4-Trimethylbenzene	20 ug/L
1,2-Dibromo-3-	20 ug/L	1,2-Dibromoethane (EDB)	20 ug/L
1,2-Dichlorobenzene	20 ug/L	1,2-Dichloroethane	20 ug/L
1,2-Dichloropropane	20 ug/L	1,3,5-Trimethylbenzene	20 ug/L
1,3-Dichlorobenzene	20 ug/L	1,3-Dichloropropane	20 ug/L
1,4-Dichlorobenzene	20 ug/L	1,4-Dioxane (p-Dioxane)	400 ug/L
2,2-Dichloropropane	20 ug/L	2-Bromo-1-chloropropane	20 ug/L
2-Butanone (MEK)	20 ug/L	2-Chloroethanol	20 ug/L
2-Chloroethylvinyl ether	40 ug/L	2-Chlorotoluene	20 ug/L
2-Hexanone	20 ug/L	4-Chlorotoluene	20 ug/L
4-Methyl-2-pentanone	20 ug/L	Acetone	20 ug/L
Acetonitrile	200 ug/L	Acrolein	20 ug/L
Acrylonitrile	20 ug/L	Allyl chloride	20 ug/L
Benzene	20 ug/L	Bromobenzene	20 ug/L
Bromochloromethane	20 ug/L	Bromodichloromethane	20 ug/L
Bromoform	20 ug/L	Bromomethane	20 ug/L
Carbon disulfide	20 ug/L	Carbon tetrachloride	20 ug/L
Chlorobenzene	20 ug/L	Chloroethane	20 ug/L
Chloroform	20 ug/L	Chloromethane	20 ug/L
Chloroprene	20 ug/L	Cyclohexane	20 ug/L
DI Water	ug/L	Dibromochloromethane	20 ug/L
Dibromomethane	20 ug/L	Dichlorodifluoromethane	20 ug/L
Ethyl methacrylate	20 ug/L	Ethylbenzene	20 ug/L
Hexachloro-1,3-butadiene	20 ug/L	Iodomethane	20 ug/L
Isobutanol	420 ug/L	Isopropylbenzene (Cumene)	20 ug/L
Methacrylonitrile	200 ug/L	Methanol	ug/L
Methyl acetate	20 ug/L	Methyl acrylate	20 ug/L
Methyl methacrylate	40 ug/L	Methyl-tert-butyl ether	20 ug/L
Methylcyclohexane	20 ug/L	Methylene Chloride	20 ug/L
Naphthalene	20 ug/L	Nitrobenzene	20 ug/L
Pentachloroethane	20 ug/L	Propionitrile	200 ug/L
Styrene	20 ug/L	Tetrachloroethene	20 ug/L
Tetrahydrofuran	20 ug/L	Toluene	20 ug/L
Trichloroethene	20 ug/L	Trichlorofluoromethane	20 ug/L
Vinyl acetate	40 ug/L	Vinyl chloride	20 ug/L
Xylene (Total)	60 ug/L	cis-1,2-Dichloroethene	20 ug/L
cis-1,3-Dichloropropene	20 ug/L	cis-1,4-Dichloro-2-butene	40 ug/L
m&p-Xylene	40 ug/L	n-Butylbenzene	20 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	20 ug/L	n-Propylbenzene	20 ug/L
o-Xylene	20 ug/L	sec-Butylbenzene	20 ug/L
tert-Butylbenzene	20 ug/L	trans-1,2-Dichloroethene	20 ug/L
trans-1,3-Dichloropropene	20 ug/L	trans-1,4-Dichloro-2-	40 ug/L

Composed of Information for Standard #54930

Composed of Standard Seq	Volume	Units
54870	20	uL
54803	20	uL
52845	20	uL
10	49.94	mL

Standard Log Report

Standards Log Information for Standard #54929

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL3

Notes:

MSV 8260 Level 3 Calibration STD @ 5.0 ug/L

Compound Name and Concentration for Standard #54929

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	5 ug/L	1,1,1-Trichloroethane	5 ug/L
1,1,2,2-Tetrachloroethane	5 ug/L	1,1,2-Trichloroethane	5 ug/L
1,1,2-	5 ug/L	1,1-Dichloroethane	5 ug/L
1,1-Dichloroethene	5 ug/L	1,1-Dichloropropene	5 ug/L
1,2,3-Trichlorobenzene	5 ug/L	1,2,3-Trichloropropane	5 ug/L
1,2,4-Trichlorobenzene	5 ug/L	1,2,4-Trimethylbenzene	5 ug/L
1,2-Dibromo-3-	5 ug/L	1,2-Dibromoethane (EDB)	5 ug/L
1,2-Dichlorobenzene	5 ug/L	1,2-Dichloroethane	5 ug/L
1,2-Dichloropropane	5 ug/L	1,3,5-Trimethylbenzene	5 ug/L
1,3-Dichlorobenzene	5 ug/L	1,3-Dichloropropane	5 ug/L
1,4-Dichlorobenzene	5 ug/L	1,4-Dioxane (p-Dioxane)	100 ug/L
2,2-Dichloropropane	5 ug/L	2-Bromo-1-chloropropane	5 ug/L
2-Butanone (MEK)	5 ug/L	2-Chloroethanol	5 ug/L
2-Chloroethylvinyl ether	10 ug/L	2-Chlorotoluene	5 ug/L
2-Hexanone	5 ug/L	4-Chlorotoluene	5 ug/L
4-Methyl-2-pentanone	5 ug/L	Acetone	5 ug/L
Acetonitrile	50 ug/L	Acrolein	5 ug/L
Acrylonitrile	5 ug/L	Allyl chloride	5 ug/L
Benzene	5 ug/L	Bromobenzene	5 ug/L
Bromochloromethane	5 ug/L	Bromodichloromethane	5 ug/L
Bromoform	5 ug/L	Bromomethane	5 ug/L
Carbon disulfide	5 ug/L	Carbon tetrachloride	5 ug/L
Chlorobenzene	5 ug/L	Chloroethane	5 ug/L
Chloroform	5 ug/L	Chloromethane	5 ug/L
Chloroprene	5 ug/L	Cyclohexane	5 ug/L
DI Water	ug/L	Dibromochloromethane	5 ug/L
Dibromomethane	5 ug/L	Dichlorodifluoromethane	5 ug/L
Ethyl methacrylate	5 ug/L	Ethylbenzene	5 ug/L
Hexachloro-1,3-butadiene	5 ug/L	Iodomethane	5 ug/L
Isobutanol	105 ug/L	Isopropylbenzene (Cumene)	5 ug/L
Methacrylonitrile	50 ug/L	Methanol	ug/L
Methyl acetate	5 ug/L	Methyl acrylate	5 ug/L
Methyl methacrylate	10 ug/L	Methyl-tert-butyl ether	5 ug/L
Methylcyclohexane	5 ug/L	Methylene Chloride	5 ug/L
Naphthalene	5 ug/L	Nitrobenzene	5 ug/L
Pentachloroethane	5 ug/L	Propionitrile	50 ug/L
Styrene	5 ug/L	Tetrachloroethene	5 ug/L
Tetrahydrofuran	5 ug/L	Toluene	5 ug/L
Trichloroethene	5 ug/L	Trichlorofluoromethane	5 ug/L
Vinyl acetate	10 ug/L	Vinyl chloride	5 ug/L
Xylene (Total)	15 ug/L	cis-1,2-Dichloroethene	5 ug/L
cis-1,3-Dichloropropene	5 ug/L	cis-1,4-Dichloro-2-butene	10 ug/L
m&p-Xylene	10 ug/L	n-Butylbenzene	5 ug/L

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	5 ug/L	n-Propylbenzene	5 ug/L
o-Xylene	5 ug/L	sec-Butylbenzene	5 ug/L
tert-Butylbenzene	5 ug/L	trans-1,2-Dichloroethene	5 ug/L
trans-1,3-Dichloropropene	5 ug/L	trans-1,4-Dichloro-2-	10 ug/L

Composed of Information for Standard #54929

Composed of Standard Seq	Volume	Units
54870	5	uL
54803	5	uL
52845	5	uL
10	49.985	mL

Standard Log Report

Standards Log Information for Standard #54928

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL2

Notes:

MSV 8260 Level 2 Calibration STD @ 1.0 ug/L

Compound Name and Concentration for Standard #54928

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	1 ug/L	1,1,1-Trichloroethane	1 ug/L
1,1,2,2-Tetrachloroethane	1 ug/L	1,1,2-Trichloroethane	1 ug/L
1,1,2-	1 ug/L	1,1-Dichloroethane	1 ug/L
1,1-Dichloroethene	1 ug/L	1,1-Dichloropropene	1 ug/L
1,2,3-Trichlorobenzene	1 ug/L	1,2,3-Trichloropropane	1 ug/L
1,2,4-Trichlorobenzene	1 ug/L	1,2,4-Trimethylbenzene	1 ug/L
1,2-Dibromo-3-	1 ug/L	1,2-Dibromoethane (EDB)	1 ug/L
1,2-Dichlorobenzene	1 ug/L	1,2-Dichloroethane	1 ug/L
1,2-Dichloropropane	1 ug/L	1,3,5-Trimethylbenzene	1 ug/L
1,3-Dichlorobenzene	1 ug/L	1,3-Dichloropropane	1 ug/L
1,4-Dichlorobenzene	1 ug/L	1,4-Dioxane (p-Dioxane)	20 ug/L
2,2-Dichloropropane	1 ug/L	2-Bromo-1-chloropropane	1 ug/L
2-Butanone (MEK)	1 ug/L	2-Chloroethanol	1 ug/L
2-Chloroethylvinyl ether	2 ug/L	2-Chlorotoluene	1 ug/L
2-Hexanone	1 ug/L	4-Chlorotoluene	1 ug/L
4-Methyl-2-pentanone	1 ug/L	Acetone	1 ug/L
Acetonitrile	10 ug/L	Acrolein	1 ug/L
Acrylonitrile	1 ug/L	Allyl chloride	1 ug/L
Benzene	1 ug/L	Bromobenzene	1 ug/L
Bromochloromethane	1 ug/L	Bromodichloromethane	1 ug/L
Bromoform	1 ug/L	Bromomethane	1 ug/L
Carbon disulfide	1 ug/L	Carbon tetrachloride	1 ug/L
Chlorobenzene	1 ug/L	Chloroethane	1 ug/L
Chloroform	1 ug/L	Chloromethane	1 ug/L
Chloroprene	1 ug/L	Cyclohexane	1 ug/L
DI Water	ug/L	Dibromochloromethane	1 ug/L
Dibromomethane	1 ug/L	Dichlorodifluoromethane	1 ug/L
Ethyl methacrylate	1 ug/L	Ethylbenzene	1 ug/L
Hexachloro-1,3-butadiene	1 ug/L	Iodomethane	1 ug/L
Isobutanol	21 ug/L	Isopropylbenzene (Cumene)	1 ug/L
Methacrylonitrile	10 ug/L	Methanol	ug/L
Methyl acetate	1 ug/L	Methyl acrylate	1 ug/L
Methyl methacrylate	2 ug/L	Methyl-tert-butyl ether	1 ug/L
Methylcyclohexane	1 ug/L	Methylene Chloride	1 ug/L
Naphthalene	1 ug/L	Nitrobenzene	1 ug/L
Pentachloroethane	1 ug/L	Propionitrile	10 ug/L
Styrene	1 ug/L	Tetrachloroethene	1 ug/L
Tetrahydrofuran	1 ug/L	Toluene	1 ug/L
Trichloroethene	1 ug/L	Trichlorofluoromethane	1 ug/L
Vinyl acetate	2 ug/L	Vinyl chloride	1 ug/L
Xylene (Total)	3 ug/L	cis-1,2-Dichloroethene	1 ug/L
cis-1,3-Dichloropropene	1 ug/L	cis-1,4-Dichloro-2-butene	2 ug/L
m&p-Xylene	2 ug/L	n-Butylbenzene	1 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	1 ug/L	n-Propylbenzene	1 ug/L
o-Xylene	1 ug/L	sec-Butylbenzene	1 ug/L
tert-Butylbenzene	1 ug/L	trans-1,2-Dichloroethene	1 ug/L
trans-1,3-Dichloropropene	1 ug/L	trans-1,4-Dichloro-2-	2 ug/L

Composed of Information for Standard #54928

Composed of Standard Seq	Volume	Units
54870	1	uL
54803	1	uL
52845	1	uL
10	49.997	mL

Standard Log Report

Standards Log Information for Standard #54927

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL1

Notes:

MSV 8260 Level 1 Calibration STD @ .5 ug/L

Compound Name and Concentration for Standard #54927

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	.5 ug/L	1,1,1-Trichloroethane	.5 ug/L
1,1,2,2-Tetrachloroethane	.5 ug/L	1,1,2-Trichloroethane	.5 ug/L
1,1,2-	.5 ug/L	1,1-Dichloroethane	.5 ug/L
1,1-Dichloroethene	.5 ug/L	1,1-Dichloropropene	.5 ug/L
1,2,3-Trichlorobenzene	.5 ug/L	1,2,3-Trichloropropane	.5 ug/L
1,2,4-Trichlorobenzene	.5 ug/L	1,2,4-Trimethylbenzene	.5 ug/L
1,2-Dibromo-3-	.5 ug/L	1,2-Dibromoethane (EDB)	.5 ug/L
1,2-Dichlorobenzene	.5 ug/L	1,2-Dichloroethane	.5 ug/L
1,2-Dichloropropane	.5 ug/L	1,3,5-Trimethylbenzene	.5 ug/L
1,3-Dichlorobenzene	.5 ug/L	1,3-Dichloropropane	.5 ug/L
1,4-Dichlorobenzene	.5 ug/L	1,4-Dioxane (p-Dioxane)	10 ug/L
2,2-Dichloropropane	.5 ug/L	2-Bromo-1-chloropropane	.5 ug/L
2-Butanone (MEK)	.5 ug/L	2-Chloroethanol	.5 ug/L
2-Chloroethylvinyl ether	1 ug/L	2-Chlorotoluene	.5 ug/L
2-Hexanone	.5 ug/L	4-Chlorotoluene	.5 ug/L
4-Methyl-2-pentanone	.5 ug/L	Acetone	.5 ug/L
Acetonitrile	5 ug/L	Acrolein	.5 ug/L
Acrylonitrile	.5 ug/L	Allyl chloride	.5 ug/L
Benzene	.5 ug/L	Bromobenzene	.5 ug/L
Bromochloromethane	.5 ug/L	Bromodichloromethane	.5 ug/L
Bromoform	.5 ug/L	Bromomethane	.5 ug/L
Carbon disulfide	.5 ug/L	Carbon tetrachloride	.5 ug/L
Chlorobenzene	.5 ug/L	Chloroethane	.5 ug/L
Chloroform	.5 ug/L	Chloromethane	.5 ug/L
Chloroprene	.5 ug/L	Cyclohexane	.5 ug/L
DI Water	ug/L	Dibromochloromethane	.5 ug/L
Dibromomethane	.5 ug/L	Dichlorodifluoromethane	.5 ug/L
Ethyl methacrylate	.5 ug/L	Ethylbenzene	.5 ug/L
Hexachloro-1,3-butadiene	.5 ug/L	Iodomethane	.5 ug/L
Isobutanol	10.5 ug/L	Isopropylbenzene (Cumene)	.5 ug/L
Methacrylonitrile	5 ug/L	Methanol	ug/L
Methyl acetate	.5 ug/L	Methyl acrylate	.5 ug/L
Methyl methacrylate	1 ug/L	Methyl-tert-butyl ether	.5 ug/L
Methylcyclohexane	.5 ug/L	Methylene Chloride	.5 ug/L
Naphthalene	.5 ug/L	Nitrobenzene	.5 ug/L
Pentachloroethane	.5 ug/L	Propionitrile	5 ug/L
Styrene	.5 ug/L	Tetrachloroethene	.5 ug/L
Tetrahydrofuran	.5 ug/L	Toluene	.5 ug/L
Trichloroethene	.5 ug/L	Trichlorofluoromethane	.5 ug/L
Vinyl acetate	1 ug/L	Vinyl chloride	.5 ug/L
Xylene (Total)	1.5 ug/L	cis-1,2-Dichloroethene	.5 ug/L
cis-1,3-Dichloropropene	.5 ug/L	cis-1,4-Dichloro-2-butene	1 ug/L
m&p-Xylene	1 ug/L	n-Butylbenzene	.5 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	.5 ug/L	n-Propylbenzene	.5 ug/L
o-Xylene	.5 ug/L	sec-Butylbenzene	.5 ug/L
tert-Butylbenzene	.5 ug/L	trans-1,2-Dichloroethene	.5 ug/L
trans-1,3-Dichloropropene	.5 ug/L	trans-1,4-Dichloro-2-	1 ug/L

Composed of Information for Standard #54927

Composed of Standard Seq	Volume	Units
54870	0.5	uL
54803	0.5	uL
52845	0.5	uL
10	49.9985	mL

Standard Log Report

Standards Log Information for Standard #54902

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	12/04/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CCV

Notes:

MSV 8260LL @ 50 ug/L

Compound Name and Concentration for Standard #54902

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/L	1,1,1-Trichloroethane	50 ug/L
1,1,2,2-Tetrachloroethane	50 ug/L	1,1,2-Trichloroethane	50 ug/L
1,1,2-	50 ug/L	1,1-Dichloroethane	50 ug/L
1,1-Dichloroethene	50 ug/L	1,1-Dichloropropene	50 ug/L
1,2,3-Trichlorobenzene	50 ug/L	1,2,3-Trichloropropane	50 ug/L
1,2,4-Trichlorobenzene	50 ug/L	1,2,4-Trimethylbenzene	50 ug/L
1,2-Dibromo-3-	50 ug/L	1,2-Dibromoethane (EDB)	50 ug/L
1,2-Dichlorobenzene	50 ug/L	1,2-Dichloroethane	50 ug/L
1,2-Dichloropropane	50 ug/L	1,3,5-Trimethylbenzene	50 ug/L
1,3-Dichlorobenzene	50 ug/L	1,3-Dichloropropane	50 ug/L
1,4-Dichlorobenzene	50 ug/L	1,4-Dioxane (p-Dioxane)	1000 ug/L
2,2-Dichloropropane	50 ug/L	2-Bromo-1-chloropropane	50 ug/L
2-Butanone (MEK)	50 ug/L	2-Chloroethanol	50 ug/L
2-Chloroethylvinyl ether	100 ug/L	2-Chlorotoluene	50 ug/L
2-Hexanone	50 ug/L	4-Chlorotoluene	50 ug/L
4-Methyl-2-pentanone	50 ug/L	Acetone	50 ug/L
Acetonitrile	500 ug/L	Acrolein	50 ug/L
Acrylonitrile	50 ug/L	Allyl chloride	50 ug/L
Benzene	50 ug/L	Bromobenzene	50 ug/L
Bromochloromethane	50 ug/L	Bromodichloromethane	50 ug/L
Bromoform	50 ug/L	Bromomethane	50 ug/L
Carbon disulfide	50 ug/L	Carbon tetrachloride	50 ug/L
Chlorobenzene	50 ug/L	Chloroethane	50 ug/L
Chloroform	50 ug/L	Chloromethane	50 ug/L
Chloroprene	50 ug/L	Cyclohexane	50 ug/L
DI Water	ug/L	Dibromochloromethane	50 ug/L
Dibromomethane	50 ug/L	Dichlorodifluoromethane	50 ug/L
Ethyl methacrylate	50 ug/L	Ethylbenzene	50 ug/L
Hexachloro-1,3-butadiene	50 ug/L	Iodomethane	50 ug/L
Isobutanol	1050 ug/L	Isopropylbenzene (Cumene)	50 ug/L
Methacrylonitrile	500 ug/L	Methanol	ug/L
Methyl acetate	50 ug/L	Methyl acrylate	50 ug/L
Methyl methacrylate	100 ug/L	Methyl-tert-butyl ether	50 ug/L
Methylcyclohexane	50 ug/L	Methylene Chloride	50 ug/L
Naphthalene	50 ug/L	Nitrobenzene	50 ug/L
Pentachloroethane	50 ug/L	Propionitrile	500 ug/L
Styrene	50 ug/L	Tetrachloroethene	50 ug/L
Tetrahydrofuran	50 ug/L	Toluene	50 ug/L
Trichloroethene	50 ug/L	Trichlorofluoromethane	50 ug/L
Vinyl acetate	100 ug/L	Vinyl chloride	50 ug/L
Xylene (Total)	150 ug/L	cis-1,2-Dichloroethene	50 ug/L
cis-1,3-Dichloropropene	50 ug/L	cis-1,4-Dichloro-2-butene	100 ug/L
m&p-Xylene	100 ug/L	n-Butylbenzene	50 ug/L

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	50 ug/L	n-Propylbenzene	50 ug/L
o-Xylene	50 ug/L	sec-Butylbenzene	50 ug/L
tert-Butylbenzene	50 ug/L	trans-1,2-Dichloroethene	50 ug/L
trans-1,3-Dichloropropene	50 ug/L	trans-1,4-Dichloro-2-	100 ug/L

Composed of Information for Standard #54902

Composed of Standard Seq	Volume	Units
54870	50	uL
54803	50	uL
52845	50	uL
10	49.85	mL

Standard Log Report

Standards Log Information for Standard #54871

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	11/30/2017	**Manufacturer:**	N/A	**Part ID:**	NA
Expire Date:	01/26/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	MSRC-SPK

Notes:

MSV MSRC LCS STD @ 50 ug/mL

Compound Name and Concentration for Standard #54871

Compound Name	Concentration	Compound Name	Concentration
2-Chloroethylvinyl ether	100 ug/mL	Acrolein	50 ug/mL
Methanol	ug/mL	Vinyl acetate	100 ug/mL

Composed of Information for Standard #54871

Composed of Standard Seq	Volume	Units
54857	1000	uL
54848	1000	uL
54846	500	uL
48747	17.5	mL

Standard Log Report

Standards Log Information for Standard #54870

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	11/30/2017	**Manufacturer:**	N/A	**Part ID:**	NA
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	RC-SPK

Notes:

MSV RC Working STD @ 50 ug/mL

Compound Name and Concentration for Standard #54870

Compound Name	Concentration	Compound Name	Concentration
2-Chloroethylvinyl ether	100 ug/mL	Acrolein	50 ug/mL
Methanol	ug/mL	Vinyl acetate	100 ug/mL

Composed of Information for Standard #54870

Composed of Standard Seq	Volume	Units
54856	1000	uL
54847	1000	uL
54845	500	uL
48747	17.5	mL

Standard Log Report

Standards Log Information for Standard #54857

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	202435
Create Date:	11/30/2017	**Manufacturer:**	o2si	**Part ID:**	020232-02-SS
Expire Date:	02/25/2018	**Manufacturer Lot ID:**	329485	**Standard ID:**	8260va-STK

Notes:

MSV Vinyl Acetate Second Source Std

Compound Name and Concentration for Standard #54857

Compound Name	Concentration	Compound Name	Concentration
Vinyl acetate	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #54856

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	202434
Create Date:	11/30/2017	**Manufacturer:**	o2si	**Part ID:**	020232-02
Expire Date:	02/25/2018	**Manufacturer Lot ID:**	329484	**Standard ID:**	8260va-STK

Notes:

MSV Vinyl Acetate

Compound Name and Concentration for Standard #54856

Compound Name	Concentration	Compound Name	Concentration
Vinyl acetate	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #54848

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202433
Create Date:	11/30/2017	**Manufacturer:**	o2si	**Part ID:**	020145-02-SS
Expire Date:	09/12/2020	**Manufacturer Lot ID:**	329483	**Standard ID:**	8260CVE-STK

Notes:

MSV 2-chloroethylvinyl ether second source

Compound Name and Concentration for Standard #54848

Compound Name	Concentration	Compound Name	Concentration
2-Chloroethylvinyl ether	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #54847

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202432
Create Date:	11/30/2017	**Manufacturer:**	o2si	**Part ID:**	020145-02
Expire Date:	11/06/2020	**Manufacturer Lot ID:**	326835	**Standard ID:**	8260CVE-STK

Notes:

MSV 2-CVhloroethyl vinyl ether

Compound Name and Concentration for Standard #54847

Compound Name	Concentration	Compound Name	Concentration
2-Chloroethylvinyl ether	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #54846

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	202431
Create Date:	11/30/2017	**Manufacturer:**	o2si	**Part ID:**	020229-04-SS
Expire Date:	01/26/2018	**Manufacturer Lot ID:**	329488	**Standard ID:**	Acrolein-STK

Notes:

MSV acrolien second source

Compound Name and Concentration for Standard #54846

Compound Name	Concentration	Compound Name	Concentration
Acrolein	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #54845

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202430
Create Date:	11/30/2017	**Manufacturer:**	o2si	**Part ID:**	020229-04
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	329486	**Standard ID:**	Acrolein-STK

Notes:

MSV Acrolein

Compound Name and Concentration for Standard #54845

Compound Name	Concentration	Compound Name	Concentration
Acrolein	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #54803

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	11/29/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	03/01/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260VC50

Notes:

MSV 8260VC50 exp 3 mos.

Compound Name and Concentration for Standard #54803

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/mL	1,1,1-Trichloroethane	50 ug/mL
1,1,2,2-Tetrachloroethane	50 ug/mL	1,1,2-Trichloroethane	50 ug/mL
1,1,2-	50 ug/mL	1,1-Dichloroethane	50 ug/mL
1,1-Dichloroethene	50 ug/mL	1,1-Dichloropropene	50 ug/mL
1,2,3-Trichlorobenzene	50 ug/mL	1,2,3-Trichloropropane	50 ug/mL
1,2,4-Trichlorobenzene	50 ug/mL	1,2,4-Trimethylbenzene	50 ug/mL
1,2-Dibromo-3-	50 ug/mL	1,2-Dibromoethane (EDB)	50 ug/mL
1,2-Dichlorobenzene	50 ug/mL	1,2-Dichloroethane	50 ug/mL
1,2-Dichloropropane	50 ug/mL	1,3,5-Trimethylbenzene	50 ug/mL
1,3-Dichlorobenzene	50 ug/mL	1,3-Dichloropropane	50 ug/mL
1,4-Dichlorobenzene	50 ug/mL	1,4-Dioxane (p-Dioxane)	1000 ug/mL
2,2-Dichloropropane	50 ug/mL	2-Bromo-1-chloropropane	50 ug/mL
2-Butanone (MEK)	50 ug/mL	2-Chloroethanol	50 ug/mL
2-Chlorotoluene	50 ug/mL	2-Hexanone	50 ug/mL
4-Chlorotoluene	50 ug/mL	4-Methyl-2-pentanone	50 ug/mL
Acetone	50 ug/mL	Acetonitrile	500 ug/mL
Acrylonitrile	50 ug/mL	Allyl chloride	50 ug/mL
Benzene	50 ug/mL	Bromobenzene	50 ug/mL
Bromochloromethane	50 ug/mL	Bromodichloromethane	50 ug/mL
Bromoform	50 ug/mL	Carbon disulfide	50 ug/mL
Carbon tetrachloride	50 ug/mL	Chlorobenzene	50 ug/mL
Chloroform	50 ug/mL	Chloroprene	50 ug/mL
Cyclohexane	50 ug/mL	Dibromochloromethane	50 ug/mL
Dibromomethane	50 ug/mL	Ethyl methacrylate	50 ug/mL
Ethylbenzene	50 ug/mL	Hexachloro-1,3-butadiene	50 ug/mL
Iodomethane	50 ug/mL	Isobutanol	1050 ug/mL
Isopropylbenzene (Cumene)	50 ug/mL	Methacrylonitrile	500 ug/mL
Methanol	ug/mL	Methyl acetate	50 ug/mL
Methyl acrylate	50 ug/mL	Methyl methacrylate	100 ug/mL
Methyl-tert-butyl ether	50 ug/mL	Methylcyclohexane	50 ug/mL
Methylene Chloride	50 ug/mL	Naphthalene	50 ug/mL
Nitrobenzene	50 ug/mL	Pentachloroethane	50 ug/mL
Propionitrile	500 ug/mL	Styrene	50 ug/mL
Tetrachloroethene	50 ug/mL	Tetrahydrofuran	50 ug/mL
Toluene	50 ug/mL	Trichloroethene	50 ug/mL
Xylene (Total)	150 ug/mL	cis-1,2-Dichloroethene	50 ug/mL
cis-1,3-Dichloropropene	50 ug/mL	cis-1,4-Dichloro-2-butene	100 ug/mL
m&p-Xylene	100 ug/mL	n-Butylbenzene	50 ug/mL
n-Hexane	50 ug/mL	n-Propylbenzene	50 ug/mL
o-Xylene	50 ug/mL	sec-Butylbenzene	50 ug/mL
tert-Butylbenzene	50 ug/mL	trans-1,2-Dichloroethene	50 ug/mL
trans-1,3-Dichloropropene	50 ug/mL	trans-1,4-Dichloro-2-	100 ug/mL

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Composed of Information for Standard #54803

Composed of Standard Seq	Volume	Units
48409	0.5	mL
48408	0.5	mL
42700	19	mL

Standard Log Report

Standards Log Information for Standard #54695

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	11/27/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	02/27/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-SPK

Notes:

MSV 8260 MSV SPK @ 50 ug/mL 3mos.

Compound Name and Concentration for Standard #54695

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/mL	1,1,1-Trichloroethane	50 ug/mL
1,1,2,2-Tetrachloroethane	50 ug/mL	1,1,2-Trichloroethane	50 ug/mL
1,1,2-	50 ug/mL	1,1-Dichloroethane	50 ug/mL
1,1-Dichloroethene	50 ug/mL	1,1-Dichloropropene	50 ug/mL
1,2,3-Trichlorobenzene	50 ug/mL	1,2,3-Trichloropropane	50 ug/mL
1,2,4-Trichlorobenzene	50 ug/mL	1,2,4-Trimethylbenzene	50 ug/mL
1,2-Dibromo-3-	50 ug/mL	1,2-Dibromoethane (EDB)	50 ug/mL
1,2-Dichlorobenzene	50 ug/mL	1,2-Dichloroethane	50 ug/mL
1,2-Dichloropropane	50 ug/mL	1,3,5-Trimethylbenzene	50 ug/mL
1,3-Dichlorobenzene	50 ug/mL	1,3-Dichloropropane	50 ug/mL
1,4-Dichlorobenzene	50 ug/mL	1,4-Dioxane (p-Dioxane)	1000 ug/mL
2,2-Dichloropropane	50 ug/mL	2-Bromo-1-chloropropane	50 ug/mL
2-Butanone (MEK)	50 ug/mL	2-Chloroethanol	50 ug/mL
2-Chlorotoluene	50 ug/mL	2-Hexanone	50 ug/mL
4-Chlorotoluene	50 ug/mL	4-Methyl-2-pentanone	50 ug/mL
Acetone	50 ug/mL	Acetonitrile	500 ug/mL
Acrylonitrile	50 ug/mL	Allyl chloride	50 ug/mL
Benzene	50 ug/mL	Bromobenzene	50 ug/mL
Bromochloromethane	50 ug/mL	Bromodichloromethane	50 ug/mL
Bromoform	50 ug/mL	Carbon disulfide	50 ug/mL
Carbon tetrachloride	50 ug/mL	Chlorobenzene	50 ug/mL
Chloroform	50 ug/mL	Chloroprene	50 ug/mL
Cyclohexane	50 ug/mL	Dibromochloromethane	50 ug/mL
Dibromomethane	50 ug/mL	Ethyl methacrylate	50 ug/mL
Ethylbenzene	50 ug/mL	Hexachloro-1,3-butadiene	50 ug/mL
Iodomethane	50 ug/mL	Isobutanol	1050 ug/mL
Isopropylbenzene (Cumene)	50 ug/mL	Methacrylonitrile	500 ug/mL
Methanol	ug/mL	Methyl acetate	50 ug/mL
Methyl acrylate	50 ug/mL	Methyl methacrylate	100 ug/mL
Methyl-tert-butyl ether	50 ug/mL	Methylcyclohexane	50 ug/mL
Methylene Chloride	50 ug/mL	Naphthalene	50 ug/mL
Nitrobenzene	50 ug/mL	Pentachloroethane	50 ug/mL
Propionitrile	500 ug/mL	Styrene	50 ug/mL
Tetrachloroethene	50 ug/mL	Tetrahydrofuran	50 ug/mL
Toluene	50 ug/mL	Trichloroethene	50 ug/mL
Xylene (Total)	150 ug/mL	cis-1,2-Dichloroethene	50 ug/mL
cis-1,3-Dichloropropene	50 ug/mL	cis-1,4-Dichloro-2-butene	100 ug/mL
m&p-Xylene	100 ug/mL	n-Butylbenzene	50 ug/mL
n-Hexane	50 ug/mL	n-Propylbenzene	50 ug/mL
o-Xylene	50 ug/mL	p-Isopropyltoluene	50 ug/mL
sec-Butylbenzene	50 ug/mL	tert-Butylbenzene	50 ug/mL
trans-1,2-Dichloroethene	50 ug/mL	trans-1,3-Dichloropropene	50 ug/mL
trans-1,4-Dichloro-2-	100 ug/mL		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Composed of Information for Standard #54695

Composed of Standard Seq	Volume	Units
52856	0.5	mL
52855	0.5	mL
48747	19	mL

Standard Log Report

Standards Log Information for Standard #54443

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-ICV

Notes:

MSV 8260H Level 5 Calibration STD @50 ug/mL

Compound Name and Concentration for Standard #54443

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	50 ug/L
Haloether 229	50 ug/L	Haloether 406	50 ug/L
Haloether 421	50 ug/L	Haloether 427	50 ug/L
Haloether 428	50 ug/L	Haloether 508	50 ug/L
Haloether 528	50 ug/L	Halomar	50 ug/L
Isoflurane	50 ug/L	Methanol	ug/L
Methoxyflurane	50 ug/L		

Composed of Information for Standard #54443

Composed of Standard Seq	Volume	Units
50863	50	uL
10	49.95	mL

Standard Log Report

Standards Log Information for Standard #54442

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CAL7

Notes:

MSV 8260H Level 7 Calibration STD @200 ug/mL

Compound Name and Concentration for Standard #54442

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	200 ug/L
Haloether 229	200 ug/L	Haloether 406	200 ug/L
Haloether 421	200 ug/L	Haloether 427	200 ug/L
Haloether 428	200 ug/L	Haloether 508	200 ug/L
Haloether 528	200 ug/L	Halomar	200 ug/L
Isoflurane	200 ug/L	Methanol	ug/L
Methoxyflurane	200 ug/L		

Composed of Information for Standard #54442

Composed of Standard Seq	Volume	Units
50863	200	uL
10	49.8	mL

Standard Log Report

Standards Log Information for Standard #54441

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CAL6

Notes:

MSV 8260H Level 6 Calibration STD @100 ug/mL

Compound Name and Concentration for Standard #54441

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	100 ug/L
Haloether 229	100 ug/L	Haloether 406	100 ug/L
Haloether 421	100 ug/L	Haloether 427	100 ug/L
Haloether 428	100 ug/L	Haloether 508	100 ug/L
Haloether 528	100 ug/L	Halomar	100 ug/L
Isoflurane	100 ug/L	Methanol	ug/L
Methoxyflurane	100 ug/L		

Composed of Information for Standard #54441

Composed of Standard Seq	Volume	Units
50863	100	uL
10	49.9	mL

Standard Log Report

Standards Log Information for Standard #54440

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CAL5

Notes:

MSV 8260H Level 5 Calibration STD @50 ug/mL

Compound Name and Concentration for Standard #54440

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	50 ug/L
Haloether 229	50 ug/L	Haloether 406	50 ug/L
Haloether 421	50 ug/L	Haloether 427	50 ug/L
Haloether 428	50 ug/L	Haloether 508	50 ug/L
Haloether 528	50 ug/L	Halomar	50 ug/L
Isoflurane	50 ug/L	Methanol	ug/L
Methoxyflurane	50 ug/L		

Composed of Information for Standard #54440

Composed of Standard Seq	Volume	Units
50863	50	uL
10	49.95	mL

Standard Log Report

Standards Log Information for Standard #54439

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CAL4

Notes:

MSV 8260H Level 4 Calibration STD @20 ug/mL

Compound Name and Concentration for Standard #54439

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	20 ug/L
Haloether 229	20 ug/L	Haloether 406	20 ug/L
Haloether 421	20 ug/L	Haloether 427	20 ug/L
Haloether 428	20 ug/L	Haloether 508	20 ug/L
Haloether 528	20 ug/L	Halomar	20 ug/L
Isoflurane	20 ug/L	Methanol	ug/L
Methoxyflurane	20 ug/L		

Composed of Information for Standard #54439

Composed of Standard Seq	Volume	Units
50863	20	uL
10	49.98	mL

Standard Log Report

Standards Log Information for Standard #54438

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CAL3

Notes:

MSV 8260H Leve 3 Calibration STD @10 ug/mL

Compound Name and Concentration for Standard #54438

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	10 ug/L
Haloether 229	10 ug/L	Haloether 406	10 ug/L
Haloether 421	10 ug/L	Haloether 427	10 ug/L
Haloether 428	10 ug/L	Haloether 508	10 ug/L
Haloether 528	10 ug/L	Halomar	10 ug/L
Isoflurane	10 ug/L	Methanol	ug/L
Methoxyflurane	10 ug/L		

Composed of Information for Standard #54438

Composed of Standard Seq	Volume	Units
50863	10	uL
10	49.99	mL

Standard Log Report

Standards Log Information for Standard #54437

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CAL2

Notes:

MSV 8260H Level 2 Calibration STD @5 ug/mL

Compound Name and Concentration for Standard #54437

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	5 ug/L
Haloether 229	5 ug/L	Haloether 406	5 ug/L
Haloether 421	5 ug/L	Haloether 427	5 ug/L
Haloether 428	5 ug/L	Haloether 508	5 ug/L
Haloether 528	5 ug/L	Halomar	5 ug/L
Isoflurane	5 ug/L	Methanol	ug/L
Methoxyflurane	5 ug/L		

Composed of Information for Standard #54437

Composed of Standard Seq	Volume	Units
50863	5	uL
10	49.995	mL

Standard Log Report

Standards Log Information for Standard #54436

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CAL1

Notes:

MSV 8260H Level 1 Calibration STD @1 ug/mL

Compound Name and Concentration for Standard #54436

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	1 ug/L
Haloether 229	1 ug/L	Haloether 406	1 ug/L
Haloether 421	1 ug/L	Haloether 427	1 ug/L
Haloether 428	1 ug/L	Haloether 508	1 ug/L
Haloether 528	1 ug/L	Halomar	1 ug/L
Isoflurane	1 ug/L	Methanol	ug/L
Methoxyflurane	1 ug/L		

Composed of Information for Standard #54436

Composed of Standard Seq	Volume	Units
50863	1	uL
10	49.999	mL

Standard Log Report

Standards Log Information for Standard #54405

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	5 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-ICV

Notes:

MSV 8260 Level 5 Calibration STD @ 50 ug/L

Compound Name and Concentration for Standard #54405

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/L	1,1,1-Trichloroethane	50 ug/L
1,1,2,2-Tetrachloroethane	50 ug/L	1,1,2-Trichloroethane	50 ug/L
1,1,2-	50 ug/L	1,1-Dichloroethane	50 ug/L
1,1-Dichloroethene	50 ug/L	1,1-Dichloropropene	50 ug/L
1,2,3-Trichlorobenzene	50 ug/L	1,2,3-Trichloropropane	50 ug/L
1,2,4-Trichlorobenzene	50 ug/L	1,2,4-Trimethylbenzene	50 ug/L
1,2-Dibromo-3-	50 ug/L	1,2-Dibromoethane (EDB)	50 ug/L
1,2-Dichlorobenzene	50 ug/L	1,2-Dichloroethane	50 ug/L
1,2-Dichloropropane	50 ug/L	1,3,5-Trimethylbenzene	50 ug/L
1,3-Dichlorobenzene	50 ug/L	1,3-Dichloropropane	50 ug/L
1,4-Dichlorobenzene	50 ug/L	1,4-Dioxane (p-Dioxane)	1000 ug/L
2,2-Dichloropropane	50 ug/L	2-Bromo-1-chloropropane	50 ug/L
2-Butanone (MEK)	50 ug/L	2-Chloroethanol	50 ug/L
2-Chloroethylvinyl ether	100 ug/L	2-Chlorotoluene	50 ug/L
2-Hexanone	50 ug/L	4-Chlorotoluene	50 ug/L
4-Methyl-2-pentanone	50 ug/L	Acetone	50 ug/L
Acetonitrile	500 ug/L	Acrolein	50 ug/L
Acrylonitrile	50 ug/L	Allyl chloride	50 ug/L
Benzene	50 ug/L	Bromobenzene	50 ug/L
Bromochloromethane	50 ug/L	Bromodichloromethane	50 ug/L
Bromoform	50 ug/L	Bromomethane	50 ug/L
Carbon disulfide	50 ug/L	Carbon tetrachloride	50 ug/L
Chlorobenzene	50 ug/L	Chloroethane	50 ug/L
Chloroform	50 ug/L	Chloromethane	50 ug/L
Chloroprene	50 ug/L	Cyclohexane	50 ug/L
DI Water	ug/L	Dibromochloromethane	50 ug/L
Dibromomethane	50 ug/L	Dichlorodifluoromethane	50 ug/L
Ethyl methacrylate	50 ug/L	Ethylbenzene	50 ug/L
Hexachloro-1,3-butadiene	50 ug/L	Iodomethane	50 ug/L
Isobutanol	1050 ug/L	Isopropylbenzene (Cumene)	50 ug/L
Methacrylonitrile	500 ug/L	Methanol	ug/L
Methyl acetate	50 ug/L	Methyl acrylate	50 ug/L
Methyl methacrylate	100 ug/L	Methyl-tert-butyl ether	50 ug/L
Methylcyclohexane	50 ug/L	Methylene Chloride	50 ug/L
Naphthalene	50 ug/L	Nitrobenzene	50 ug/L
Pentachloroethane	50 ug/L	Propionitrile	500 ug/L
Styrene	50 ug/L	Tetrachloroethene	50 ug/L
Tetrahydrofuran	50 ug/L	Toluene	50 ug/L
Trichloroethene	50 ug/L	Trichlorofluoromethane	50 ug/L
Vinyl acetate	100 ug/L	Vinyl chloride	50 ug/L
Xylene (Total)	150 ug/L	cis-1,2-Dichloroethene	50 ug/L
cis-1,3-Dichloropropene	50 ug/L	cis-1,4-Dichloro-2-butene	100 ug/L
m&p-Xylene	100 ug/L	n-Butylbenzene	50 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	50 ug/L	n-Propylbenzene	50 ug/L
o-Xylene	50 ug/L	p-Isopropyltoluene	50 ug/L
sec-Butylbenzene	50 ug/L	tert-Butylbenzene	50 ug/L
trans-1,2-Dichloroethene	50 ug/L	trans-1,3-Dichloropropene	50 ug/L
trans-1,4-Dichloro-2-	100 ug/L		

Composed of Information for Standard #54405

Composed of Standard Seq	Volume	Units
52975	5	uL
52189	5	uL
47377	5	uL
10	4.98	mL

Standard Log Report

Standards Log Information for Standard #54403

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL7

Notes:

MSV 8260 Level 7 Calibration STD @ 200 ug/L

Compound Name and Concentration for Standard #54403

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	200 ug/L	1,1,1-Trichloroethane	200 ug/L
1,1,2,2-Tetrachloroethane	200 ug/L	1,1,2-Trichloroethane	200 ug/L
1,1,2-	200 ug/L	1,1-Dichloroethane	200 ug/L
1,1-Dichloroethene	200 ug/L	1,1-Dichloropropene	200 ug/L
1,2,3-Trichlorobenzene	200 ug/L	1,2,3-Trichloropropane	200 ug/L
1,2,4-Trichlorobenzene	200 ug/L	1,2,4-Trimethylbenzene	200 ug/L
1,2-Dibromo-3-	200 ug/L	1,2-Dibromoethane (EDB)	200 ug/L
1,2-Dichlorobenzene	200 ug/L	1,2-Dichloroethane	200 ug/L
1,2-Dichloropropane	200 ug/L	1,3,5-Trimethylbenzene	200 ug/L
1,3-Dichlorobenzene	200 ug/L	1,3-Dichloropropane	200 ug/L
1,4-Dichlorobenzene	200 ug/L	1,4-Dioxane (p-Dioxane)	4000 ug/L
2,2-Dichloropropane	200 ug/L	2-Bromo-1-chloropropane	200 ug/L
2-Butanone (MEK)	200 ug/L	2-Chloroethanol	200 ug/L
2-Chloroethylvinyl ether	400 ug/L	2-Chlorotoluene	200 ug/L
2-Hexanone	200 ug/L	4-Chlorotoluene	200 ug/L
4-Methyl-2-pentanone	200 ug/L	Acetone	200 ug/L
Acetonitrile	2000 ug/L	Acrolein	200 ug/L
Acrylonitrile	200 ug/L	Allyl chloride	200 ug/L
Benzene	200 ug/L	Bromobenzene	200 ug/L
Bromochloromethane	200 ug/L	Bromodichloromethane	200 ug/L
Bromoform	200 ug/L	Bromomethane	200 ug/L
Carbon disulfide	200 ug/L	Carbon tetrachloride	200 ug/L
Chlorobenzene	200 ug/L	Chloroethane	200 ug/L
Chloroform	200 ug/L	Chloromethane	200 ug/L
Chloroprene	200 ug/L	Cyclohexane	200 ug/L
DI Water	ug/L	Dibromochloromethane	200 ug/L
Dibromomethane	200 ug/L	Dichlorodifluoromethane	200 ug/L
Ethyl methacrylate	200 ug/L	Ethylbenzene	200 ug/L
Hexachloro-1,3-butadiene	200 ug/L	Iodomethane	200 ug/L
Isobutanol	4200 ug/L	Isopropylbenzene (Cumene)	200 ug/L
Methacrylonitrile	2000 ug/L	Methanol	ug/L
Methyl acetate	200 ug/L	Methyl acrylate	200 ug/L
Methyl methacrylate	400 ug/L	Methyl-tert-butyl ether	200 ug/L
Methylcyclohexane	200 ug/L	Methylene Chloride	200 ug/L
Naphthalene	200 ug/L	Nitrobenzene	200 ug/L
Pentachloroethane	200 ug/L	Propionitrile	2000 ug/L
Styrene	200 ug/L	Tetrachloroethene	200 ug/L
Tetrahydrofuran	200 ug/L	Toluene	200 ug/L
Trichloroethene	200 ug/L	Trichlorofluoromethane	200 ug/L
Vinyl acetate	400 ug/L	Vinyl chloride	200 ug/L
Xylene (Total)	600 ug/L	cis-1,2-Dichloroethene	200 ug/L
cis-1,3-Dichloropropene	200 ug/L	cis-1,4-Dichloro-2-butene	400 ug/L
m&p-Xylene	400 ug/L	n-Butylbenzene	200 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	200 ug/L	n-Propylbenzene	200 ug/L
o-Xylene	200 ug/L	sec-Butylbenzene	200 ug/L
tert-Butylbenzene	200 ug/L	trans-1,2-Dichloroethene	200 ug/L
trans-1,3-Dichloropropene	200 ug/L	trans-1,4-Dichloro-2-	400 ug/L

Composed of Information for Standard #54403

Composed of Standard Seq	Volume	Units
52974	200	uL
52867	200	uL
52845	200	uL
10	49.4	mL

Standard Log Report

Standards Log Information for Standard #54402

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL6

Notes:

MSV 8260 Level 6 Calibration STD @ 100 ug/L

Compound Name and Concentration for Standard #54402

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	100 ug/L	1,1,1-Trichloroethane	100 ug/L
1,1,2,2-Tetrachloroethane	100 ug/L	1,1,2-Trichloroethane	100 ug/L
1,1,2-	100 ug/L	1,1-Dichloroethane	100 ug/L
1,1-Dichloroethene	100 ug/L	1,1-Dichloropropene	100 ug/L
1,2,3-Trichlorobenzene	100 ug/L	1,2,3-Trichloropropane	100 ug/L
1,2,4-Trichlorobenzene	100 ug/L	1,2,4-Trimethylbenzene	100 ug/L
1,2-Dibromo-3-	100 ug/L	1,2-Dibromoethane (EDB)	100 ug/L
1,2-Dichlorobenzene	100 ug/L	1,2-Dichloroethane	100 ug/L
1,2-Dichloropropane	100 ug/L	1,3,5-Trimethylbenzene	100 ug/L
1,3-Dichlorobenzene	100 ug/L	1,3-Dichloropropane	100 ug/L
1,4-Dichlorobenzene	100 ug/L	1,4-Dioxane (p-Dioxane)	2000 ug/L
2,2-Dichloropropane	100 ug/L	2-Bromo-1-chloropropane	100 ug/L
2-Butanone (MEK)	100 ug/L	2-Chloroethanol	100 ug/L
2-Chloroethylvinyl ether	200 ug/L	2-Chlorotoluene	100 ug/L
2-Hexanone	100 ug/L	4-Chlorotoluene	100 ug/L
4-Methyl-2-pentanone	100 ug/L	Acetone	100 ug/L
Acetonitrile	1000 ug/L	Acrolein	100 ug/L
Acrylonitrile	100 ug/L	Allyl chloride	100 ug/L
Benzene	100 ug/L	Bromobenzene	100 ug/L
Bromochloromethane	100 ug/L	Bromodichloromethane	100 ug/L
Bromoform	100 ug/L	Bromomethane	100 ug/L
Carbon disulfide	100 ug/L	Carbon tetrachloride	100 ug/L
Chlorobenzene	100 ug/L	Chloroethane	100 ug/L
Chloroform	100 ug/L	Chloromethane	100 ug/L
Chloroprene	100 ug/L	Cyclohexane	100 ug/L
DI Water	ug/L	Dibromochloromethane	100 ug/L
Dibromomethane	100 ug/L	Dichlorodifluoromethane	100 ug/L
Ethyl methacrylate	100 ug/L	Ethylbenzene	100 ug/L
Hexachloro-1,3-butadiene	100 ug/L	Iodomethane	100 ug/L
Isobutanol	2100 ug/L	Isopropylbenzene (Cumene)	100 ug/L
Methacrylonitrile	1000 ug/L	Methanol	ug/L
Methyl acetate	100 ug/L	Methyl acrylate	100 ug/L
Methyl methacrylate	200 ug/L	Methyl-tert-butyl ether	100 ug/L
Methylcyclohexane	100 ug/L	Methylene Chloride	100 ug/L
Naphthalene	100 ug/L	Nitrobenzene	100 ug/L
Pentachloroethane	100 ug/L	Propionitrile	1000 ug/L
Styrene	100 ug/L	Tetrachloroethene	100 ug/L
Tetrahydrofuran	100 ug/L	Toluene	100 ug/L
Trichloroethene	100 ug/L	Trichlorofluoromethane	100 ug/L
Vinyl acetate	200 ug/L	Vinyl chloride	100 ug/L
Xylene (Total)	300 ug/L	cis-1,2-Dichloroethene	100 ug/L
cis-1,3-Dichloropropene	100 ug/L	cis-1,4-Dichloro-2-butene	200 ug/L
m&p-Xylene	200 ug/L	n-Butylbenzene	100 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	100 ug/L	n-Propylbenzene	100 ug/L
o-Xylene	100 ug/L	sec-Butylbenzene	100 ug/L
tert-Butylbenzene	100 ug/L	trans-1,2-Dichloroethene	100 ug/L
trans-1,3-Dichloropropene	100 ug/L	trans-1,4-Dichloro-2-	200 ug/L

Composed of Information for Standard #54402

Composed of Standard Seq	Volume	Units
52974	100	uL
52867	100	uL
52845	100	uL
10	49.7	mL

Standard Log Report

Standards Log Information for Standard #54401

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL5

Notes:

MSV 8260 Level 5 Calibration STD @ 50 ug/L

Compound Name and Concentration for Standard #54401

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/L	1,1,1-Trichloroethane	50 ug/L
1,1,2,2-Tetrachloroethane	50 ug/L	1,1,2-Trichloroethane	50 ug/L
1,1,2-	50 ug/L	1,1-Dichloroethane	50 ug/L
1,1-Dichloroethene	50 ug/L	1,1-Dichloropropene	50 ug/L
1,2,3-Trichlorobenzene	50 ug/L	1,2,3-Trichloropropane	50 ug/L
1,2,4-Trichlorobenzene	50 ug/L	1,2,4-Trimethylbenzene	50 ug/L
1,2-Dibromo-3-	50 ug/L	1,2-Dibromoethane (EDB)	50 ug/L
1,2-Dichlorobenzene	50 ug/L	1,2-Dichloroethane	50 ug/L
1,2-Dichloropropane	50 ug/L	1,3,5-Trimethylbenzene	50 ug/L
1,3-Dichlorobenzene	50 ug/L	1,3-Dichloropropane	50 ug/L
1,4-Dichlorobenzene	50 ug/L	1,4-Dioxane (p-Dioxane)	1000 ug/L
2,2-Dichloropropane	50 ug/L	2-Bromo-1-chloropropane	50 ug/L
2-Butanone (MEK)	50 ug/L	2-Chloroethanol	50 ug/L
2-Chloroethylvinyl ether	100 ug/L	2-Chlorotoluene	50 ug/L
2-Hexanone	50 ug/L	4-Chlorotoluene	50 ug/L
4-Methyl-2-pentanone	50 ug/L	Acetone	50 ug/L
Acetonitrile	500 ug/L	Acrolein	50 ug/L
Acrylonitrile	50 ug/L	Allyl chloride	50 ug/L
Benzene	50 ug/L	Bromobenzene	50 ug/L
Bromochloromethane	50 ug/L	Bromodichloromethane	50 ug/L
Bromoform	50 ug/L	Bromomethane	50 ug/L
Carbon disulfide	50 ug/L	Carbon tetrachloride	50 ug/L
Chlorobenzene	50 ug/L	Chloroethane	50 ug/L
Chloroform	50 ug/L	Chloromethane	50 ug/L
Chloroprene	50 ug/L	Cyclohexane	50 ug/L
DI Water	ug/L	Dibromochloromethane	50 ug/L
Dibromomethane	50 ug/L	Dichlorodifluoromethane	50 ug/L
Ethyl methacrylate	50 ug/L	Ethylbenzene	50 ug/L
Hexachloro-1,3-butadiene	50 ug/L	Iodomethane	50 ug/L
Isobutanol	1050 ug/L	Isopropylbenzene (Cumene)	50 ug/L
Methacrylonitrile	500 ug/L	Methanol	ug/L
Methyl acetate	50 ug/L	Methyl acrylate	50 ug/L
Methyl methacrylate	100 ug/L	Methyl-tert-butyl ether	50 ug/L
Methylcyclohexane	50 ug/L	Methylene Chloride	50 ug/L
Naphthalene	50 ug/L	Nitrobenzene	50 ug/L
Pentachloroethane	50 ug/L	Propionitrile	500 ug/L
Styrene	50 ug/L	Tetrachloroethene	50 ug/L
Tetrahydrofuran	50 ug/L	Toluene	50 ug/L
Trichloroethene	50 ug/L	Trichlorofluoromethane	50 ug/L
Vinyl acetate	100 ug/L	Vinyl chloride	50 ug/L
Xylene (Total)	150 ug/L	cis-1,2-Dichloroethene	50 ug/L
cis-1,3-Dichloropropene	50 ug/L	cis-1,4-Dichloro-2-butene	100 ug/L
m&p-Xylene	100 ug/L	n-Butylbenzene	50 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	50 ug/L	n-Propylbenzene	50 ug/L
o-Xylene	50 ug/L	sec-Butylbenzene	50 ug/L
tert-Butylbenzene	50 ug/L	trans-1,2-Dichloroethene	50 ug/L
trans-1,3-Dichloropropene	50 ug/L	trans-1,4-Dichloro-2-	100 ug/L

Composed of Information for Standard #54401

Composed of Standard Seq	Volume	Units
52974	50	uL
52867	50	uL
52845	50	uL
10	49.85	mL

Standard Log Report

Standards Log Information for Standard #54400

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL4

Notes:

MSV 8260 Level 4 Calibration STD @ 20 ug/L

Compound Name and Concentration for Standard #54400

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	20 ug/L	1,1,1-Trichloroethane	20 ug/L
1,1,2,2-Tetrachloroethane	20 ug/L	1,1,2-Trichloroethane	20 ug/L
1,1,2-	20 ug/L	1,1-Dichloroethane	20 ug/L
1,1-Dichloroethene	20 ug/L	1,1-Dichloropropene	20 ug/L
1,2,3-Trichlorobenzene	20 ug/L	1,2,3-Trichloropropane	20 ug/L
1,2,4-Trichlorobenzene	20 ug/L	1,2,4-Trimethylbenzene	20 ug/L
1,2-Dibromo-3-	20 ug/L	1,2-Dibromoethane (EDB)	20 ug/L
1,2-Dichlorobenzene	20 ug/L	1,2-Dichloroethane	20 ug/L
1,2-Dichloropropane	20 ug/L	1,3,5-Trimethylbenzene	20 ug/L
1,3-Dichlorobenzene	20 ug/L	1,3-Dichloropropane	20 ug/L
1,4-Dichlorobenzene	20 ug/L	1,4-Dioxane (p-Dioxane)	400 ug/L
2,2-Dichloropropane	20 ug/L	2-Bromo-1-chloropropane	20 ug/L
2-Butanone (MEK)	20 ug/L	2-Chloroethanol	20 ug/L
2-Chloroethylvinyl ether	40 ug/L	2-Chlorotoluene	20 ug/L
2-Hexanone	20 ug/L	4-Chlorotoluene	20 ug/L
4-Methyl-2-pentanone	20 ug/L	Acetone	20 ug/L
Acetonitrile	200 ug/L	Acrolein	20 ug/L
Acrylonitrile	20 ug/L	Allyl chloride	20 ug/L
Benzene	20 ug/L	Bromobenzene	20 ug/L
Bromochloromethane	20 ug/L	Bromodichloromethane	20 ug/L
Bromoform	20 ug/L	Bromomethane	20 ug/L
Carbon disulfide	20 ug/L	Carbon tetrachloride	20 ug/L
Chlorobenzene	20 ug/L	Chloroethane	20 ug/L
Chloroform	20 ug/L	Chloromethane	20 ug/L
Chloroprene	20 ug/L	Cyclohexane	20 ug/L
DI Water	ug/L	Dibromochloromethane	20 ug/L
Dibromomethane	20 ug/L	Dichlorodifluoromethane	20 ug/L
Ethyl methacrylate	20 ug/L	Ethylbenzene	20 ug/L
Hexachloro-1,3-butadiene	20 ug/L	Iodomethane	20 ug/L
Isobutanol	420 ug/L	Isopropylbenzene (Cumene)	20 ug/L
Methacrylonitrile	200 ug/L	Methanol	ug/L
Methyl acetate	20 ug/L	Methyl acrylate	20 ug/L
Methyl methacrylate	40 ug/L	Methyl-tert-butyl ether	20 ug/L
Methylcyclohexane	20 ug/L	Methylene Chloride	20 ug/L
Naphthalene	20 ug/L	Nitrobenzene	20 ug/L
Pentachloroethane	20 ug/L	Propionitrile	200 ug/L
Styrene	20 ug/L	Tetrachloroethene	20 ug/L
Tetrahydrofuran	20 ug/L	Toluene	20 ug/L
Trichloroethene	20 ug/L	Trichlorofluoromethane	20 ug/L
Vinyl acetate	40 ug/L	Vinyl chloride	20 ug/L
Xylene (Total)	60 ug/L	cis-1,2-Dichloroethene	20 ug/L
cis-1,3-Dichloropropene	20 ug/L	cis-1,4-Dichloro-2-butene	40 ug/L
m&p-Xylene	40 ug/L	n-Butylbenzene	20 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	20 ug/L	n-Propylbenzene	20 ug/L
o-Xylene	20 ug/L	sec-Butylbenzene	20 ug/L
tert-Butylbenzene	20 ug/L	trans-1,2-Dichloroethene	20 ug/L
trans-1,3-Dichloropropene	20 ug/L	trans-1,4-Dichloro-2-	40 ug/L

Composed of Information for Standard #54400

Composed of Standard Seq	Volume	Units
52974	20	uL
52867	20	uL
52845	20	uL
10	49.94	mL

Standard Log Report

Standards Log Information for Standard #54399

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL3

Notes:

MSV 8260 Level 3 Calibration STD @ 5.0 ug/L

Compound Name and Concentration for Standard #54399

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	5 ug/L	1,1,1-Trichloroethane	5 ug/L
1,1,2,2-Tetrachloroethane	5 ug/L	1,1,2-Trichloroethane	5 ug/L
1,1,2-	5 ug/L	1,1-Dichloroethane	5 ug/L
1,1-Dichloroethene	5 ug/L	1,1-Dichloropropene	5 ug/L
1,2,3-Trichlorobenzene	5 ug/L	1,2,3-Trichloropropane	5 ug/L
1,2,4-Trichlorobenzene	5 ug/L	1,2,4-Trimethylbenzene	5 ug/L
1,2-Dibromo-3-	5 ug/L	1,2-Dibromoethane (EDB)	5 ug/L
1,2-Dichlorobenzene	5 ug/L	1,2-Dichloroethane	5 ug/L
1,2-Dichloropropane	5 ug/L	1,3,5-Trimethylbenzene	5 ug/L
1,3-Dichlorobenzene	5 ug/L	1,3-Dichloropropane	5 ug/L
1,4-Dichlorobenzene	5 ug/L	1,4-Dioxane (p-Dioxane)	100 ug/L
2,2-Dichloropropane	5 ug/L	2-Bromo-1-chloropropane	5 ug/L
2-Butanone (MEK)	5 ug/L	2-Chloroethanol	5 ug/L
2-Chloroethylvinyl ether	10 ug/L	2-Chlorotoluene	5 ug/L
2-Hexanone	5 ug/L	4-Chlorotoluene	5 ug/L
4-Methyl-2-pentanone	5 ug/L	Acetone	5 ug/L
Acetonitrile	50 ug/L	Acrolein	5 ug/L
Acrylonitrile	5 ug/L	Allyl chloride	5 ug/L
Benzene	5 ug/L	Bromobenzene	5 ug/L
Bromochloromethane	5 ug/L	Bromodichloromethane	5 ug/L
Bromoform	5 ug/L	Bromomethane	5 ug/L
Carbon disulfide	5 ug/L	Carbon tetrachloride	5 ug/L
Chlorobenzene	5 ug/L	Chloroethane	5 ug/L
Chloroform	5 ug/L	Chloromethane	5 ug/L
Chloroprene	5 ug/L	Cyclohexane	5 ug/L
DI Water	ug/L	Dibromochloromethane	5 ug/L
Dibromomethane	5 ug/L	Dichlorodifluoromethane	5 ug/L
Ethyl methacrylate	5 ug/L	Ethylbenzene	5 ug/L
Hexachloro-1,3-butadiene	5 ug/L	Iodomethane	5 ug/L
Isobutanol	105 ug/L	Isopropylbenzene (Cumene)	5 ug/L
Methacrylonitrile	50 ug/L	Methanol	ug/L
Methyl acetate	5 ug/L	Methyl acrylate	5 ug/L
Methyl methacrylate	10 ug/L	Methyl-tert-butyl ether	5 ug/L
Methylcyclohexane	5 ug/L	Methylene Chloride	5 ug/L
Naphthalene	5 ug/L	Nitrobenzene	5 ug/L
Pentachloroethane	5 ug/L	Propionitrile	50 ug/L
Styrene	5 ug/L	Tetrachloroethene	5 ug/L
Tetrahydrofuran	5 ug/L	Toluene	5 ug/L
Trichloroethene	5 ug/L	Trichlorofluoromethane	5 ug/L
Vinyl acetate	10 ug/L	Vinyl chloride	5 ug/L
Xylene (Total)	15 ug/L	cis-1,2-Dichloroethene	5 ug/L
cis-1,3-Dichloropropene	5 ug/L	cis-1,4-Dichloro-2-butene	10 ug/L
m&p-Xylene	10 ug/L	n-Butylbenzene	5 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	5 ug/L	n-Propylbenzene	5 ug/L
o-Xylene	5 ug/L	sec-Butylbenzene	5 ug/L
tert-Butylbenzene	5 ug/L	trans-1,2-Dichloroethene	5 ug/L
trans-1,3-Dichloropropene	5 ug/L	trans-1,4-Dichloro-2-	10 ug/L

Composed of Information for Standard #54399

Composed of Standard Seq	Volume	Units
52974	5	uL
52867	5	uL
52845	5	uL
10	49.985	mL

Standard Log Report

Standards Log Information for Standard #54398

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL2

Notes:

MSV 8260 Level 2 Calibration STD @ 1.0 ug/L

Compound Name and Concentration for Standard #54398

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	1 ug/L	1,1,1-Trichloroethane	1 ug/L
1,1,2,2-Tetrachloroethane	1 ug/L	1,1,2-Trichloroethane	1 ug/L
1,1,2-	1 ug/L	1,1-Dichloroethane	1 ug/L
1,1-Dichloroethene	1 ug/L	1,1-Dichloropropene	1 ug/L
1,2,3-Trichlorobenzene	1 ug/L	1,2,3-Trichloropropane	1 ug/L
1,2,4-Trichlorobenzene	1 ug/L	1,2,4-Trimethylbenzene	1 ug/L
1,2-Dibromo-3-	1 ug/L	1,2-Dibromoethane (EDB)	1 ug/L
1,2-Dichlorobenzene	1 ug/L	1,2-Dichloroethane	1 ug/L
1,2-Dichloropropane	1 ug/L	1,3,5-Trimethylbenzene	1 ug/L
1,3-Dichlorobenzene	1 ug/L	1,3-Dichloropropane	1 ug/L
1,4-Dichlorobenzene	1 ug/L	1,4-Dioxane (p-Dioxane)	20 ug/L
2,2-Dichloropropane	1 ug/L	2-Bromo-1-chloropropane	1 ug/L
2-Butanone (MEK)	1 ug/L	2-Chloroethanol	1 ug/L
2-Chloroethylvinyl ether	2 ug/L	2-Chlorotoluene	1 ug/L
2-Hexanone	1 ug/L	4-Chlorotoluene	1 ug/L
4-Methyl-2-pentanone	1 ug/L	Acetone	1 ug/L
Acetonitrile	10 ug/L	Acrolein	1 ug/L
Acrylonitrile	1 ug/L	Allyl chloride	1 ug/L
Benzene	1 ug/L	Bromobenzene	1 ug/L
Bromochloromethane	1 ug/L	Bromodichloromethane	1 ug/L
Bromoform	1 ug/L	Bromomethane	1 ug/L
Carbon disulfide	1 ug/L	Carbon tetrachloride	1 ug/L
Chlorobenzene	1 ug/L	Chloroethane	1 ug/L
Chloroform	1 ug/L	Chloromethane	1 ug/L
Chloroprene	1 ug/L	Cyclohexane	1 ug/L
DI Water	ug/L	Dibromochloromethane	1 ug/L
Dibromomethane	1 ug/L	Dichlorodifluoromethane	1 ug/L
Ethyl methacrylate	1 ug/L	Ethylbenzene	1 ug/L
Hexachloro-1,3-butadiene	1 ug/L	Iodomethane	1 ug/L
Isobutanol	21 ug/L	Isopropylbenzene (Cumene)	1 ug/L
Methacrylonitrile	10 ug/L	Methanol	ug/L
Methyl acetate	1 ug/L	Methyl acrylate	1 ug/L
Methyl methacrylate	2 ug/L	Methyl-tert-butyl ether	1 ug/L
Methylcyclohexane	1 ug/L	Methylene Chloride	1 ug/L
Naphthalene	1 ug/L	Nitrobenzene	1 ug/L
Pentachloroethane	1 ug/L	Propionitrile	10 ug/L
Styrene	1 ug/L	Tetrachloroethene	1 ug/L
Tetrahydrofuran	1 ug/L	Toluene	1 ug/L
Trichloroethene	1 ug/L	Trichlorofluoromethane	1 ug/L
Vinyl acetate	2 ug/L	Vinyl chloride	1 ug/L
Xylene (Total)	3 ug/L	cis-1,2-Dichloroethene	1 ug/L
cis-1,3-Dichloropropene	1 ug/L	cis-1,4-Dichloro-2-butene	2 ug/L
m&p-Xylene	2 ug/L	n-Butylbenzene	1 ug/L

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	1 ug/L	n-Propylbenzene	1 ug/L
o-Xylene	1 ug/L	sec-Butylbenzene	1 ug/L
tert-Butylbenzene	1 ug/L	trans-1,2-Dichloroethene	1 ug/L
trans-1,3-Dichloropropene	1 ug/L	trans-1,4-Dichloro-2-	2 ug/L

Composed of Information for Standard #54398

Composed of Standard Seq	Volume	Units
52974	1	uL
52867	1	uL
52845	1	uL
10	49.997	mL

Standard Log Report

Standards Log Information for Standard #54397

WORKING STANDARD

Created By:	GEM	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	11/17/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-CAL1

Notes:

MSV 8260 Level 1 Calibration STD @ .5 ug/L

Compound Name and Concentration for Standard #54397

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	.5 ug/L	1,1,1-Trichloroethane	.5 ug/L
1,1,2,2-Tetrachloroethane	.5 ug/L	1,1,2-Trichloroethane	.5 ug/L
1,1,2-	.5 ug/L	1,1-Dichloroethane	.5 ug/L
1,1-Dichloroethene	.5 ug/L	1,1-Dichloropropene	.5 ug/L
1,2,3-Trichlorobenzene	.5 ug/L	1,2,3-Trichloropropane	.5 ug/L
1,2,4-Trichlorobenzene	.5 ug/L	1,2,4-Trimethylbenzene	.5 ug/L
1,2-Dibromo-3-	.5 ug/L	1,2-Dibromoethane (EDB)	.5 ug/L
1,2-Dichlorobenzene	.5 ug/L	1,2-Dichloroethane	.5 ug/L
1,2-Dichloropropane	.5 ug/L	1,3,5-Trimethylbenzene	.5 ug/L
1,3-Dichlorobenzene	.5 ug/L	1,3-Dichloropropane	.5 ug/L
1,4-Dichlorobenzene	.5 ug/L	1,4-Dioxane (p-Dioxane)	10 ug/L
2,2-Dichloropropane	.5 ug/L	2-Bromo-1-chloropropane	.5 ug/L
2-Butanone (MEK)	.5 ug/L	2-Chloroethanol	.5 ug/L
2-Chloroethylvinyl ether	1 ug/L	2-Chlorotoluene	.5 ug/L
2-Hexanone	.5 ug/L	4-Chlorotoluene	.5 ug/L
4-Methyl-2-pentanone	.5 ug/L	Acetone	.5 ug/L
Acetonitrile	5 ug/L	Acrolein	.5 ug/L
Acrylonitrile	.5 ug/L	Allyl chloride	.5 ug/L
Benzene	.5 ug/L	Bromobenzene	.5 ug/L
Bromochloromethane	.5 ug/L	Bromodichloromethane	.5 ug/L
Bromoform	.5 ug/L	Bromomethane	.5 ug/L
Carbon disulfide	.5 ug/L	Carbon tetrachloride	.5 ug/L
Chlorobenzene	.5 ug/L	Chloroethane	.5 ug/L
Chloroform	.5 ug/L	Chloromethane	.5 ug/L
Chloroprene	.5 ug/L	Cyclohexane	.5 ug/L
DI Water	ug/L	Dibromochloromethane	.5 ug/L
Dibromomethane	.5 ug/L	Dichlorodifluoromethane	.5 ug/L
Ethyl methacrylate	.5 ug/L	Ethylbenzene	.5 ug/L
Hexachloro-1,3-butadiene	.5 ug/L	Iodomethane	.5 ug/L
Isobutanol	10.5 ug/L	Isopropylbenzene (Cumene)	.5 ug/L
Methacrylonitrile	5 ug/L	Methanol	ug/L
Methyl acetate	.5 ug/L	Methyl acrylate	.5 ug/L
Methyl methacrylate	1 ug/L	Methyl-tert-butyl ether	.5 ug/L
Methylcyclohexane	.5 ug/L	Methylene Chloride	.5 ug/L
Naphthalene	.5 ug/L	Nitrobenzene	.5 ug/L
Pentachloroethane	.5 ug/L	Propionitrile	5 ug/L
Styrene	.5 ug/L	Tetrachloroethene	.5 ug/L
Tetrahydrofuran	.5 ug/L	Toluene	.5 ug/L
Trichloroethene	.5 ug/L	Trichlorofluoromethane	.5 ug/L
Vinyl acetate	1 ug/L	Vinyl chloride	.5 ug/L
Xylene (Total)	1.5 ug/L	cis-1,2-Dichloroethene	.5 ug/L
cis-1,3-Dichloropropene	.5 ug/L	cis-1,4-Dichloro-2-butene	1 ug/L
m&p-Xylene	1 ug/L	n-Butylbenzene	.5 ug/L

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Compound Name	Concentration	Compound Name	Concentration
n-Hexane	.5 ug/L	n-Propylbenzene	.5 ug/L
o-Xylene	.5 ug/L	sec-Butylbenzene	.5 ug/L
tert-Butylbenzene	.5 ug/L	trans-1,2-Dichloroethene	.5 ug/L
trans-1,3-Dichloropropene	.5 ug/L	trans-1,4-Dichloro-2-	1 ug/L

Composed of Information for Standard #54397

Composed of Standard Seq	Volume	Units
52974	0.5	uL
52867	0.5	uL
52845	0.5	uL
10	49.9985	mL

Standard Log Report

Standards Log Information for Standard #53090

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	10/13/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	04/13/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-ISSS

Notes:

MSV 8260 IS/SS @ 50 ug/mL 6 mos

Compound Name and Concentration for Standard #53090

Compound Name	Concentration	Compound Name	Concentration
1,4-Dichlorobenzene-d4	50 ug/mL	1,4-Difluorobenzene (IS)	50 ug/mL
4-Bromofluorobenzene (S)	50 ug/mL	Chlorobenzene-D5 (IS)	50 ug/mL
Dibromofluoromethane (S)	50 ug/mL	Methanol	ug/mL
Pentafluorobenzene (IS)	50 ug/mL	Toluene-d8 (S)	50 ug/mL

Composed of Information for Standard #53090

Composed of Standard Seq	Volume	Units
43122	1	mL
42700	48	mL
31260	1	mL

Standard Log Report

Standards Log Information for Standard #52975

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	10/11/2017	**Manufacturer:**	N/A	**Part ID:**	NA
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	MSRC-SPK

Notes:

MSV MSRC LCS STD @ 50 ug/mL

Compound Name and Concentration for Standard #52975

Compound Name	Concentration	Compound Name	Concentration
2-Chloroethylvinyl ether	100 ug/mL	Acrolein	50 ug/mL
Methanol	ug/mL	Vinyl acetate	100 ug/mL

Composed of Information for Standard #52975

Composed of Standard Seq	Volume	Units
52950	1000	uL
52948	1000	uL
52940	500	uL
48746	17.5	mL

Standard Log Report

Standards Log Information for Standard #52974

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	10/11/2017	**Manufacturer:**	N/A	**Part ID:**	NA
Expire Date:	01/29/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	RC-SPK

Notes:

MSV RC Working STD @ 50 ug/mL

Compound Name and Concentration for Standard #52974

Compound Name	Concentration	Compound Name	Concentration
2-Chloroethylvinyl ether	100 ug/mL	Acrolein	50 ug/mL
Methanol	ug/mL	Vinyl acetate	100 ug/mL

Composed of Information for Standard #52974

Composed of Standard Seq	Volume	Units
54856	1000	uL
54847	1000	uL
54845	500	uL
48747	17.5	mL

Standard Log Report

Standards Log Information for Standard #52950

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	202363
Create Date:	10/10/2017	**Manufacturer:**	o2si	**Part ID:**	020232-02-SS
Expire Date:	01/01/2018	**Manufacturer Lot ID:**	323950	**Standard ID:**	8260va-STK

Notes:

MSV Vinyl Acetate Second Source Std

Compound Name and Concentration for Standard #52950

Compound Name	Concentration	Compound Name	Concentration
Vinyl acetate	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #52948

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202361
Create Date:	10/10/2017	**Manufacturer:**	o2si	**Part ID:**	020145-02-SS
Expire Date:	10/18/2019	**Manufacturer Lot ID:**	290464	**Standard ID:**	8260CVE-STK

Notes:

MSV 2-chloroethylvinyl ether second source

Compound Name and Concentration for Standard #52948

Compound Name	Concentration	Compound Name	Concentration
2-Chloroethylvinyl ether	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #52940

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	202359
Create Date:	10/10/2017	**Manufacturer:**	o2si	**Part ID:**	020229-04-SS
Expire Date:	12/02/2017	**Manufacturer Lot ID:**	323953	**Standard ID:**	Acrolein-STK

Notes:

MSV acrolien second source

Compound Name and Concentration for Standard #52940

Compound Name	Concentration	Compound Name	Concentration
Acrolein	2000 ug/mL		

Standard Log Report

Standards Log Information for Standard #52867

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	10/10/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/10/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260VC50

Notes:

MSV 8260VC50 exp 3 mos.

Compound Name and Concentration for Standard #52867

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/mL	1,1,1-Trichloroethane	50 ug/mL
1,1,2,2-Tetrachloroethane	50 ug/mL	1,1,2-Trichloroethane	50 ug/mL
1,1,2-	50 ug/mL	1,1-Dichloroethane	50 ug/mL
1,1-Dichloroethene	50 ug/mL	1,1-Dichloropropene	50 ug/mL
1,2,3-Trichlorobenzene	50 ug/mL	1,2,3-Trichloropropane	50 ug/mL
1,2,4-Trichlorobenzene	50 ug/mL	1,2,4-Trimethylbenzene	50 ug/mL
1,2-Dibromo-3-	50 ug/mL	1,2-Dibromoethane (EDB)	50 ug/mL
1,2-Dichlorobenzene	50 ug/mL	1,2-Dichloroethane	50 ug/mL
1,2-Dichloropropane	50 ug/mL	1,3,5-Trimethylbenzene	50 ug/mL
1,3-Dichlorobenzene	50 ug/mL	1,3-Dichloropropane	50 ug/mL
1,4-Dichlorobenzene	50 ug/mL	1,4-Dioxane (p-Dioxane)	1000 ug/mL
2,2-Dichloropropane	50 ug/mL	2-Bromo-1-chloropropane	50 ug/mL
2-Butanone (MEK)	50 ug/mL	2-Chloroethanol	50 ug/mL
2-Chlorotoluene	50 ug/mL	2-Hexanone	50 ug/mL
4-Chlorotoluene	50 ug/mL	4-Methyl-2-pentanone	50 ug/mL
Acetone	50 ug/mL	Acetonitrile	500 ug/mL
Acrylonitrile	50 ug/mL	Allyl chloride	50 ug/mL
Benzene	50 ug/mL	Bromobenzene	50 ug/mL
Bromochloromethane	50 ug/mL	Bromodichloromethane	50 ug/mL
Bromoform	50 ug/mL	Carbon disulfide	50 ug/mL
Carbon tetrachloride	50 ug/mL	Chlorobenzene	50 ug/mL
Chloroform	50 ug/mL	Chloroprene	50 ug/mL
Cyclohexane	50 ug/mL	Dibromochloromethane	50 ug/mL
Dibromomethane	50 ug/mL	Ethyl methacrylate	50 ug/mL
Ethylbenzene	50 ug/mL	Hexachloro-1,3-butadiene	50 ug/mL
Iodomethane	50 ug/mL	Isobutanol	1050 ug/mL
Isopropylbenzene (Cumene)	50 ug/mL	Methacrylonitrile	500 ug/mL
Methanol	ug/mL	Methyl acetate	50 ug/mL
Methyl acrylate	50 ug/mL	Methyl methacrylate	100 ug/mL
Methyl-tert-butyl ether	50 ug/mL	Methylcyclohexane	50 ug/mL
Methylene Chloride	50 ug/mL	Naphthalene	50 ug/mL
Nitrobenzene	50 ug/mL	Pentachloroethane	50 ug/mL
Propionitrile	500 ug/mL	Styrene	50 ug/mL
Tetrachloroethene	50 ug/mL	Tetrahydrofuran	50 ug/mL
Toluene	50 ug/mL	Trichloroethene	50 ug/mL
Xylene (Total)	150 ug/mL	cis-1,2-Dichloroethene	50 ug/mL
cis-1,3-Dichloropropene	50 ug/mL	cis-1,4-Dichloro-2-butene	100 ug/mL
m&p-Xylene	100 ug/mL	n-Butylbenzene	50 ug/mL
n-Hexane	50 ug/mL	n-Propylbenzene	50 ug/mL
o-Xylene	50 ug/mL	sec-Butylbenzene	50 ug/mL
tert-Butylbenzene	50 ug/mL	trans-1,2-Dichloroethene	50 ug/mL
trans-1,3-Dichloropropene	50 ug/mL	trans-1,4-Dichloro-2-	100 ug/mL

Standard Log Report

Composed of Information for Standard #52867

Composed of Standard Seq	Volume	Units
48409	0.5	mL
48408	0.5	mL
42700	19	mL

Standard Log Report

Standards Log Information for Standard #52856

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202354
Create Date:	10/09/2017	**Manufacturer:**	o2si	**Part ID:**	120404-01-SS
Expire Date:	12/14/2018	**Manufacturer Lot ID:**	294909	**Standard ID:**	VOA2SS-STK

Notes:

MSV VOC 10-1 Second Source 2000ppm

Compound Name and Concentration for Standard #52856

Compound Name	Concentration	Compound Name	Concentration
2-Butanone (MEK)	2000 mg/L	2-Hexanone	2000 mg/L
4-Methyl-2-pentanone	2000 mg/L	Acetone	2000 mg/L
Cyclohexane	2000 mg/L	Isobutanol	2000 mg/L
Methyl acetate	2000 mg/L	Methyl-tert-butyl ether	2000 mg/L
Methylcyclohexane	2000 mg/L	n-Hexane	2000 mg/L

Standard Log Report

Standards Log Information for Standard #52855

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202353
Create Date:	10/09/2017	**Manufacturer:**	o2si	**Part ID:**	120391-02-SS
Expire Date:	12/14/2018	**Manufacturer Lot ID:**	294912	**Standard ID:**	8260VOA1-

Notes:

MSV 8260 VOC Solution 79-2 2000ppm second source

Compound Name and Concentration for Standard #52855

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	2000 mg/L	1,1,1-Trichloroethane	2000 mg/L
1,1,2,2-Tetrachloroethane	2000 mg/L	1,1,2-Trichloroethane	2000 mg/L
1,1,2-	2000 mg/L	1,1-Dichloroethane	2000 mg/L
1,1-Dichloroethene	2000 mg/L	1,1-Dichloropropene	2000 mg/L
1,2,3-Trichlorobenzene	2000 mg/L	1,2,3-Trichloropropane	2000 mg/L
1,2,4-Trichlorobenzene	2000 mg/L	1,2,4-Trimethylbenzene	2000 mg/L
1,2-Dibromo-3-	2000 mg/L	1,2-Dibromoethane (EDB)	2000 mg/L
1,2-Dichlorobenzene	2000 mg/L	1,2-Dichloroethane	2000 mg/L
1,2-Dichloropropane	2000 mg/L	1,3,5-Trimethylbenzene	2000 mg/L
1,3-Dichlorobenzene	2000 mg/L	1,3-Dichloropropane	2000 mg/L
1,4-Dichlorobenzene	2000 mg/L	1,4-Dioxane (p-Dioxane)	40000 mg/L
2,2-Dichloropropane	2000 mg/L	2-Bromo-1-chloropropane	2000 mg/L
2-Chloroethanol	2000 mg/L	2-Chlorotoluene	2000 mg/L
4-Chlorotoluene	2000 mg/L	Acetonitrile	20000 mg/L
Acrylonitrile	2000 mg/L	Allyl chloride	2000 mg/L
Benzene	2000 mg/L	Bromobenzene	2000 mg/L
Bromochloromethane	2000 mg/L	Bromodichloromethane	2000 mg/L
Bromoform	2000 mg/L	Carbon disulfide	2000 mg/L
Carbon tetrachloride	2000 mg/L	Chlorobenzene	2000 mg/L
Chloroform	2000 mg/L	Chloroprene	2000 mg/L
Dibromochloromethane	2000 mg/L	Dibromomethane	2000 mg/L
Ethyl methacrylate	2000 mg/L	Ethylbenzene	2000 mg/L
Hexachloro-1,3-butadiene	2000 mg/L	Iodomethane	2000 mg/L
Isobutanol	40000 mg/L	Isopropylbenzene (Cumene)	2000 mg/L
Methacrylonitrile	20000 mg/L	Methyl acrylate	2000 mg/L
Methyl methacrylate	4000 mg/L	Methylene Chloride	2000 mg/L
Naphthalene	2000 mg/L	Nitrobenzene	2000 mg/L
Pentachloroethane	2000 mg/L	Propionitrile	20000 mg/L
Styrene	2000 mg/L	Tetrachloroethene	2000 mg/L
Tetrahydrofuran	2000 mg/L	Toluene	2000 mg/L
Trichloroethene	2000 mg/L	Xylene (Total)	6000 mg/L
cis-1,2-Dichloroethene	2000 mg/L	cis-1,3-Dichloropropene	2000 mg/L
cis-1,4-Dichloro-2-butene	4000 mg/L	m&p-Xylene	4000 mg/L
n-Butylbenzene	2000 mg/L	n-Propylbenzene	2000 mg/L
o-Xylene	2000 mg/L	p-Isopropyltoluene	2000 mg/L
sec-Butylbenzene	2000 mg/L	tert-Butylbenzene	2000 mg/L
trans-1,2-Dichloroethene	2000 mg/L	trans-1,3-Dichloropropene	2000 mg/L
trans-1,4-Dichloro-2-	4000 mg/L		

Standard Log Report

Standards Log Information for Standard #52845

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202350
Create Date:	10/09/2017	**Manufacturer:**	o2si	**Part ID:**	120016-05
Expire Date:	02/04/2020	**Manufacturer Lot ID:**	298022	**Standard ID:**	8260GAS-STK

Notes:

MSV 8260 CCV Gas Spike 50ppm

Compound Name and Concentration for Standard #52845

Compound Name	Concentration	Compound Name	Concentration
Bromomethane	50 mg/L	Chloroethane	50 mg/L
Chloromethane	50 mg/L	Dichlorodifluoromethane	50 mg/L
Trichlorofluoromethane	50 mg/L	Vinyl chloride	50 mg/L

Standard Log Report

Standards Log Information for Standard #52189

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	20 mL	**Lot ID:**	NA
Create Date:	09/25/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	12/25/2017	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-SPK

Notes:

MSV 8260 MSV SPK @ 50 ug/mL 3mos.

Compound Name and Concentration for Standard #52189

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	50 ug/mL	1,1,1-Trichloroethane	50 ug/mL
1,1,2,2-Tetrachloroethane	50 ug/mL	1,1,2-Trichloroethane	50 ug/mL
1,1,2-	50 ug/mL	1,1-Dichloroethane	50 ug/mL
1,1-Dichloroethene	50 ug/mL	1,1-Dichloropropene	50 ug/mL
1,2,3-Trichlorobenzene	50 ug/mL	1,2,3-Trichloropropane	50 ug/mL
1,2,4-Trichlorobenzene	50 ug/mL	1,2,4-Trimethylbenzene	50 ug/mL
1,2-Dibromo-3-	50 ug/mL	1,2-Dibromoethane (EDB)	50 ug/mL
1,2-Dichlorobenzene	50 ug/mL	1,2-Dichloroethane	50 ug/mL
1,2-Dichloropropane	50 ug/mL	1,3,5-Trimethylbenzene	50 ug/mL
1,3-Dichlorobenzene	50 ug/mL	1,3-Dichloropropane	50 ug/mL
1,4-Dichlorobenzene	50 ug/mL	1,4-Dioxane (p-Dioxane)	1000 ug/mL
2,2-Dichloropropane	50 ug/mL	2-Bromo-1-chloropropane	50 ug/mL
2-Butanone (MEK)	50 ug/mL	2-Chloroethanol	50 ug/mL
2-Chlorotoluene	50 ug/mL	2-Hexanone	50 ug/mL
4-Chlorotoluene	50 ug/mL	4-Methyl-2-pentanone	50 ug/mL
Acetone	50 ug/mL	Acetonitrile	500 ug/mL
Acrylonitrile	50 ug/mL	Allyl chloride	50 ug/mL
Benzene	50 ug/mL	Bromobenzene	50 ug/mL
Bromochloromethane	50 ug/mL	Bromodichloromethane	50 ug/mL
Bromoform	50 ug/mL	Carbon disulfide	50 ug/mL
Carbon tetrachloride	50 ug/mL	Chlorobenzene	50 ug/mL
Chloroform	50 ug/mL	Chloroprene	50 ug/mL
Cyclohexane	50 ug/mL	Dibromochloromethane	50 ug/mL
Dibromomethane	50 ug/mL	Ethyl methacrylate	50 ug/mL
Ethylbenzene	50 ug/mL	Hexachloro-1,3-butadiene	50 ug/mL
Iodomethane	50 ug/mL	Isobutanol	1050 ug/mL
Isopropylbenzene (Cumene)	50 ug/mL	Methacrylonitrile	500 ug/mL
Methanol	ug/mL	Methyl acetate	50 ug/mL
Methyl acrylate	50 ug/mL	Methyl methacrylate	100 ug/mL
Methyl-tert-butyl ether	50 ug/mL	Methylcyclohexane	50 ug/mL
Methylene Chloride	50 ug/mL	Naphthalene	50 ug/mL
Nitrobenzene	50 ug/mL	Pentachloroethane	50 ug/mL
Propionitrile	500 ug/mL	Styrene	50 ug/mL
Tetrachloroethene	50 ug/mL	Tetrahydrofuran	50 ug/mL
Toluene	50 ug/mL	Trichloroethene	50 ug/mL
Xylene (Total)	150 ug/mL	cis-1,2-Dichloroethene	50 ug/mL
cis-1,3-Dichloropropene	50 ug/mL	cis-1,4-Dichloro-2-butene	100 ug/mL
m&p-Xylene	100 ug/mL	n-Butylbenzene	50 ug/mL
n-Hexane	50 ug/mL	n-Propylbenzene	50 ug/mL
o-Xylene	50 ug/mL	p-Isopropyltoluene	50 ug/mL
sec-Butylbenzene	50 ug/mL	tert-Butylbenzene	50 ug/mL
trans-1,2-Dichloroethene	50 ug/mL	trans-1,3-Dichloropropene	50 ug/mL
trans-1,4-Dichloro-2-	100 ug/mL		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Composed of Information for Standard #52189

Composed of Standard Seq	Volume	Units
48746	19	mL
41541	0.5	mL
41540	0.5	mL

Standard Log Report

Standards Log Information for Standard #50864

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	08/28/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260H-CCV

Notes:

MSV 8260H Level 5 Calibration STD @50 ug/mL

Compound Name and Concentration for Standard #50864

Compound Name	Concentration	Compound Name	Concentration
DI Water	ug/L	Enflurane	50 ug/L
Haloether 229	50 ug/L	Haloether 406	50 ug/L
Haloether 421	50 ug/L	Haloether 427	50 ug/L
Haloether 428	50 ug/L	Haloether 508	50 ug/L
Haloether 528	50 ug/L	Halomar	50 ug/L
Isoflurane	50 ug/L	Methanol	ug/L
Methoxyflurane	50 ug/L		

Composed of Information for Standard #50864

Composed of Standard Seq	Volume	Units
50863	50	uL
10	4.99	mL

Standard Log Report

Standards Log Information for Standard #50863

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	100 mL	**Lot ID:**	NA
Create Date:	08/28/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	N/A	**Standard ID:**	HALO50-SPK

Notes:

MSV Halo50 @50 ug/mL

Compound Name and Concentration for Standard #50863

Compound Name	Concentration	Compound Name	Concentration
Enflurane	50 ug/mL	Haloether 229	50 ug/mL
Haloether 406	50 ug/mL	Haloether 421	50 ug/mL
Haloether 427	50 ug/mL	Haloether 428	50 ug/mL
Haloether 508	50 ug/mL	Haloether 528	50 ug/mL
Halomar	50 ug/mL	Isoflurane	50 ug/mL
Methanol	ug/mL	Methoxyflurane	50 ug/mL

Composed of Information for Standard #50863

Composed of Standard Seq	Volume	Units
48746	94.5	mL
496	500	uL
495	500	uL
494	500	uL
493	500	uL
492	500	uL
491	500	uL
490	500	uL
489	500	uL
488	500	uL
487	500	uL
486	500	uL

Standard Log Report

Standards Log Information for Standard #48747

STOCK STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	P/T Methanol
Create Date:	07/10/2017	**Manufacturer:**	FISHER	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	171415	**Standard ID:**	RGNT179

Notes:

MSV METHANOL PURGE AND TRAP

Compound Name and Concentration for Standard #48747

Compound Name	Concentration	Compound Name	Concentration
Methanol	mg/L		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #48746

STOCK STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	P/T Methanol
Create Date:	07/10/2017	**Manufacturer:**	FISHER	**Part ID:**	N/A
Expire Date:	01/07/2020	**Manufacturer Lot ID:**	166879	**Standard ID:**	RGNT179

Notes:

MSV METHANOL PURGE AND TRAP

Compound Name and Concentration for Standard #48746

Compound Name	Concentration	Compound Name	Concentration
Methanol	mg/L		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #48409

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202188
Create Date:	06/30/2017	**Manufacturer:**	o2si	**Part ID:**	120404-01
Expire Date:	12/14/2018	**Manufacturer Lot ID:**	294907	**Standard ID:**	8260VOA2-

Notes:

MSV VOC 10-1 2000ppm

Compound Name and Concentration for Standard #48409

Compound Name	Concentration	Compound Name	Concentration
2-Butanone (MEK)	2000	2-Hexanone	2000
4-Methyl-2-pentanone	2000	Acetone	2000
Cyclohexane	2000	Isobutanol	2000
Methyl acetate	2000	Methyl-tert-butyl ether	2000
Methylcyclohexane	2000	n-Hexane	2000

Standard Log Report

Standards Log Information for Standard #48408

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202189
Create Date:	06/30/2017	**Manufacturer:**	o2si	**Part ID:**	120391-02
Expire Date:	01/04/2019	**Manufacturer Lot ID:**	296144	**Standard ID:**	8260VOA1-

Notes:

MSV 8260 VOC Solution 79-2 2000ppm

Compound Name and Concentration for Standard #48408

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	2000 mg/L	1,1,1-Trichloroethane	2000 mg/L
1,1,2,2-Tetrachloroethane	2000 mg/L	1,1,2-Trichloroethane	2000 mg/L
1,1,2-	2000 mg/L	1,1-Dichloroethane	2000 mg/L
1,1-Dichloroethene	2000 mg/L	1,1-Dichloropropene	2000 mg/L
1,2,3-Trichlorobenzene	2000 mg/L	1,2,3-Trichloropropane	2000 mg/L
1,2,4-Trichlorobenzene	2000 mg/L	1,2,4-Trimethylbenzene	2000 mg/L
1,2-Dibromo-3-	2000 mg/L	1,2-Dibromoethane (EDB)	2000 mg/L
1,2-Dichlorobenzene	2000 mg/L	1,2-Dichloroethane	2000 mg/L
1,2-Dichloropropane	2000 mg/L	1,3,5-Trimethylbenzene	2000 mg/L
1,3-Dichlorobenzene	2000 mg/L	1,3-Dichloropropane	2000 mg/L
1,4-Dichlorobenzene	2000 mg/L	1,4-Dioxane (p-Dioxane)	40000 mg/L
2,2-Dichloropropane	2000 mg/L	2-Bromo-1-chloropropane	2000 mg/L
2-Chloroethanol	2000 mg/L	2-Chlorotoluene	2000 mg/L
4-Chlorotoluene	2000 mg/L	Acetonitrile	20000 mg/L
Acrylonitrile	2000 mg/L	Allyl chloride	2000 mg/L
Benzene	2000 mg/L	Bromobenzene	2000 mg/L
Bromochloromethane	2000 mg/L	Bromodichloromethane	2000 mg/L
Bromoform	2000 mg/L	Carbon disulfide	2000 mg/L
Carbon tetrachloride	2000 mg/L	Chlorobenzene	2000 mg/L
Chloroform	2000 mg/L	Chloroprene	2000 mg/L
Dibromochloromethane	2000 mg/L	Dibromomethane	2000 mg/L
Ethyl methacrylate	2000 mg/L	Ethylbenzene	2000 mg/L
Hexachloro-1,3-butadiene	2000 mg/L	Iodomethane	2000 mg/L
Isobutanol	40000 mg/L	Isopropylbenzene (Cumene)	2000 mg/L
Methacrylonitrile	20000 mg/L	Methyl acrylate	2000 mg/L
Methyl methacrylate	4000 mg/L	Methylene Chloride	2000 mg/L
Naphthalene	2000 mg/L	Nitrobenzene	2000 mg/L
Pentachloroethane	2000 mg/L	Propionitrile	20000 mg/L
Styrene	2000 mg/L	Tetrachloroethene	2000 mg/L
Tetrahydrofuran	2000 mg/L	Toluene	2000 mg/L
Trichloroethene	2000 mg/L	Xylene (Total)	6000 mg/L
cis-1,2-Dichloroethene	2000 mg/L	cis-1,3-Dichloropropene	2000 mg/L
cis-1,4-Dichloro-2-butene	4000 mg/L	m&p-Xylene	4000 mg/L
n-Butylbenzene	2000 mg/L	n-Propylbenzene	2000 mg/L
o-Xylene	2000 mg/L	sec-Butylbenzene	2000 mg/L
tert-Butylbenzene	2000 mg/L	trans-1,2-Dichloroethene	2000 mg/L
trans-1,3-Dichloropropene	2000 mg/L	trans-1,4-Dichloro-2-	4000 mg/L

Standard Log Report

Standards Log Information for Standard #47890

WORKING STANDARD

Created By:	RMP	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	06/16/2017	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	08/03/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-ISSS

Notes:

MSV 8260 IS/SS @ 50 ug/mL 6 mos

Compound Name and Concentration for Standard #47890

Compound Name	Concentration	Compound Name	Concentration
1,4-Dichlorobenzene-d4	50 ug/mL	1,4-Difluorobenzene (IS)	50 ug/mL
4-Bromofluorobenzene (S)	50 ug/mL	Chlorobenzene-D5 (IS)	50 ug/mL
Dibromofluoromethane (S)	50 ug/mL	Methanol	ug/mL
Pentafluorobenzene (IS)	50 ug/mL	Toluene-d8 (S)	50 ug/mL

Composed of Information for Standard #47890

Composed of Standard Seq	Volume	Units
43122	1	mL
42700	48	mL
31260	1	mL

Standard Log Report

Standards Log Information for Standard #47383

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202156
Create Date:	06/02/2017	**Manufacturer:**	Restek	**Part ID:**	562275
Expire Date:	05/31/2022	**Manufacturer Lot ID:**	A0127886	**Standard ID:**	8260GAS-SPK

Notes:

MSV 8260 Gas Spike Second Source 50ppm

Compound Name and Concentration for Standard #47383

Compound Name	Concentration	Compound Name	Concentration
Bromomethane	50 ug/mL	Chloroethane	50 ug/mL
Chloromethane	50 ug/mL	Dichlorodifluoromethane	50 ug/mL
Trichlorofluoromethane	50 ug/mL	Vinyl chloride	50 ug/mL

Standard Log Report

Standards Log Information for Standard #47377

INDIVIDUAL STANDARD

Created By:	RMP	**Volume of Standard:**	1 mL	**Lot ID:**	202155
Create Date:	05/27/2017	**Manufacturer:**	Restek	**Part ID:**	562275
Expire Date:	08/31/2021	**Manufacturer Lot ID:**	A0121170	**Standard ID:**	8260GAS-SPK

Notes:

MSV 8260 Gas Spike Second Source 50ppm

Compound Name and Concentration for Standard #47377

Compound Name	Concentration	Compound Name	Concentration
Bromomethane	50 ug/mL	Chloroethane	50 ug/mL
Chloromethane	50 ug/mL	Dichlorodifluoromethane	50 ug/mL
Trichlorofluoromethane	50 ug/mL	Vinyl chloride	50 ug/mL

Standard Log Report

Standards Log Information for Standard #43122

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**	1 mL	**Lot ID:**	202006
Create Date:	02/06/2017	**Manufacturer:**	o2si	**Part ID:**	120302-02-P
Expire Date:	01/27/2019	**Manufacturer Lot ID:**	254344	**Standard ID:**	8260-IS-STK

Notes:

MSV 8260B ISTD Solution @ 2500 ug/mL

Compound Name and Concentration for Standard #43122

Compound Name	Concentration	Compound Name	Concentration
1,4-Dichlorobenzene-d4	2500 ug/mL	1,4-Difluorobenzene (IS)	2500 ug/mL
Chlorobenzene-D5 (IS)	2500 ug/mL	Pentafluorobenzene (IS)	2500 ug/mL

Standard Log Report

Standards Log Information for Standard #42700

STOCK STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	201982
Create Date:	01/25/2017	**Manufacturer:**	FISHER	**Part ID:**	N/A
Expire Date:	01/25/2019	**Manufacturer Lot ID:**	166879	**Standard ID:**	RGNT179

Notes:

GCV METHANOL PURGE AND TRAP

Compound Name and Concentration for Standard #42700

Compound Name	Concentration	Compound Name	Concentration
Methanol	mg/L		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #41541

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**	1 mL	**Lot ID:**	201941
Create Date:	12/22/2016	**Manufacturer:**	o2si	**Part ID:**	120391-02-SS
Expire Date:	12/14/2018	**Manufacturer Lot ID:**	294912	**Standard ID:**	8260VOA1-

Notes:

MSV 8260 VOC Solution 79-2 2000ppm second source

Compound Name and Concentration for Standard #41541

Compound Name	Concentration	Compound Name	Concentration
1,1,1,2-Tetrachloroethane	2000 mg/L	1,1,1-Trichloroethane	2000 mg/L
1,1,2,2-Tetrachloroethane	2000 mg/L	1,1,2-Trichloroethane	2000 mg/L
1,1,2-	2000 mg/L	1,1-Dichloroethane	2000 mg/L
1,1-Dichloroethene	2000 mg/L	1,1-Dichloropropene	2000 mg/L
1,2,3-Trichlorobenzene	2000 mg/L	1,2,3-Trichloropropane	2000 mg/L
1,2,4-Trichlorobenzene	2000 mg/L	1,2,4-Trimethylbenzene	2000 mg/L
1,2-Dibromo-3-	2000 mg/L	1,2-Dibromoethane (EDB)	2000 mg/L
1,2-Dichlorobenzene	2000 mg/L	1,2-Dichloroethane	2000 mg/L
1,2-Dichloropropane	2000 mg/L	1,3,5-Trimethylbenzene	2000 mg/L
1,3-Dichlorobenzene	2000 mg/L	1,3-Dichloropropane	2000 mg/L
1,4-Dichlorobenzene	2000 mg/L	1,4-Dioxane (p-Dioxane)	40000 mg/L
2,2-Dichloropropane	2000 mg/L	2-Bromo-1-chloropropane	2000 mg/L
2-Chloroethanol	2000 mg/L	2-Chlorotoluene	2000 mg/L
4-Chlorotoluene	2000 mg/L	Acetonitrile	20000 mg/L
Acrylonitrile	2000 mg/L	Allyl chloride	2000 mg/L
Benzene	2000 mg/L	Bromobenzene	2000 mg/L
Bromochloromethane	2000 mg/L	Bromodichloromethane	2000 mg/L
Bromoform	2000 mg/L	Carbon disulfide	2000 mg/L
Carbon tetrachloride	2000 mg/L	Chlorobenzene	2000 mg/L
Chloroform	2000 mg/L	Chloroprene	2000 mg/L
Dibromochloromethane	2000 mg/L	Dibromomethane	2000 mg/L
Ethyl methacrylate	2000 mg/L	Ethylbenzene	2000 mg/L
Hexachloro-1,3-butadiene	2000 mg/L	Iodomethane	2000 mg/L
Isobutanol	40000 mg/L	Isopropylbenzene (Cumene)	2000 mg/L
Methacrylonitrile	20000 mg/L	Methyl acrylate	2000 mg/L
Methyl methacrylate	4000 mg/L	Methylene Chloride	2000 mg/L
Naphthalene	2000 mg/L	Nitrobenzene	2000 mg/L
Pentachloroethane	2000 mg/L	Propionitrile	20000 mg/L
Styrene	2000 mg/L	Tetrachloroethene	2000 mg/L
Tetrahydrofuran	2000 mg/L	Toluene	2000 mg/L
Trichloroethene	2000 mg/L	Xylene (Total)	6000 mg/L
cis-1,2-Dichloroethene	2000 mg/L	cis-1,3-Dichloropropene	2000 mg/L
cis-1,4-Dichloro-2-butene	4000 mg/L	m&p-Xylene	4000 mg/L
n-Butylbenzene	2000 mg/L	n-Propylbenzene	2000 mg/L
o-Xylene	2000 mg/L	p-Isopropyltoluene	2000 mg/L
sec-Butylbenzene	2000 mg/L	tert-Butylbenzene	2000 mg/L
trans-1,2-Dichloroethene	2000 mg/L	trans-1,3-Dichloropropene	2000 mg/L
trans-1,4-Dichloro-2-	4000 mg/L		

Standard Log Report

Standards Log Information for Standard #41540

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**	1 mL	**Lot ID:**	201942
Create Date:	12/22/2016	**Manufacturer:**	o2si	**Part ID:**	120404-01-SS
Expire Date:	12/14/2018	**Manufacturer Lot ID:**	294909	**Standard ID:**	VOA2SS-STK

Notes:

MSV VOC 10-1 Second Source 2000ppm

Compound Name and Concentration for Standard #41540

Compound Name	Concentration	Compound Name	Concentration
2-Butanone (MEK)	2000 mg/L	2-Hexanone	2000 mg/L
4-Methyl-2-pentanone	2000 mg/L	Acetone	2000 mg/L
Cyclohexane	2000 mg/L	Isobutanol	2000 mg/L
Methyl acetate	2000 mg/L	Methyl-tert-butyl ether	2000 mg/L
Methylcyclohexane	2000 mg/L	n-Hexane	2000 mg/L

Standard Log Report

Standards Log Information for Standard #35766

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	50 mL	**Lot ID:**	NA
Create Date:	07/28/2016	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	01/06/2018	**Manufacturer Lot ID:**	N/A	**Standard ID:**	8260-TUNE

Notes:

MSV SS50

Compound Name and Concentration for Standard #35766

Compound Name	Concentration	Compound Name	Concentration
4-Bromofluorobenzene (S)	50 ug/mL	Dibromofluoromethane (S)	50 ug/mL
Methanol	ug/mL	Toluene-d8 (S)	50 ug/mL

Composed of Information for Standard #35766

Composed of Standard Seq	Volume	Units
34257	49	mL
21626	1	mL

Standard Log Report

Standards Log Information for Standard #34257

STOCK STANDARD

Created By:	RMP	**Volume of Standard:**		**Lot ID:**	201709
Create Date:	06/21/2016	**Manufacturer:**	FISHER	**Part ID:**	N/A
Expire Date:	12/18/2018	**Manufacturer Lot ID:**	158718	**Standard ID:**	RGNT179

Notes:

GCV METHANOL PURGE AND TRAP

Compound Name and Concentration for Standard #34257

Compound Name	Concentration	Compound Name	Concentration
Methanol	mg/L		

Standard Log Report

Standards Log Information for Standard #31260

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**	1 mL	**Lot ID:**	201593
Create Date:	04/05/2016	**Manufacturer:**	o2si	**Part ID:**	120005-05-P
Expire Date:	08/03/2018	**Manufacturer Lot ID:**	256730	**Standard ID:**	8260-SUR-

Notes:

MSV 8260B-M Surrogate Solution 2500ppm

Compound Name and Concentration for Standard #31260

Compound Name	Concentration	Compound Name	Concentration
4-Bromofluorobenzene (S)	2500 ug/mL	Dibromofluoromethane (S)	2500 ug/mL
Toluene-d8 (S)	2500 ug/mL		

Standard Log Report

Standards Log Information for Standard #21626

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**	1 mL	**Lot ID:**	201211
Create Date:	08/10/2015	**Manufacturer:**	o2si	**Part ID:**	120005-05-P
Expire Date:	08/03/2018	**Manufacturer Lot ID:**	256730	**Standard ID:**	8260-SUR-

Notes:

MSV 8260B- Surrogate Solution 2500ppm

Compound Name and Concentration for Standard #21626

Compound Name	Concentration	Compound Name	Concentration
4-Bromofluorobenzene (S)	2500 ug/mL	Dibromofluoromethane (S)	2500 ug/mL
Toluene-d8 (S)	2500 ug/mL		

Standard Log Report

Standards Log Information for Standard #2539

STOCK STANDARD

Created By:	MLS	**Volume of Standard:**	1000 mL	**Lot ID:**	NA
Create Date:	09/21/2011	**Manufacturer:**	FISHER	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	N/A	**Standard ID:**	RGNT179

Notes:

MSV METHANOL HALOETHERS

Compound Name and Concentration for Standard #2539

Compound Name	Concentration	Compound Name	Concentration
Methanol	mg/L		

Standard Log Report

Standards Log Information for Standard #496

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	Enflur-10000

Notes:

MSV Enflurane @ 10000 ug/mL

Compound Name and Concentration for Standard #496

Compound Name	Concentration	Compound Name	Concentration
Enflurane	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #496

Composed of Standard Seq	Volume	Units
2539	null	uL
360	100	mg

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #495

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	N/A	**Standard ID:**	Halomar10000

Notes:

MSV Halomar @ 10000 ug/mL

Compound Name and Concentration for Standard #495

Compound Name	Concentration	Compound Name	Concentration
Halomar	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #495

Composed of Standard Seq	Volume	Units
2539	10000	uL
359	100	mg

Standard Log Report

Standards Log Information for Standard #494

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	Methoxy1000

Notes:

MSV Methoxyfluran @ 10000 ug/mL

Compound Name and Concentration for Standard #494

Compound Name	Concentration	Compound Name	Concentration
Methanol	ug/mL	Methoxyflurane	10000 ug/mL

Composed of Information for Standard #494

Composed of Standard Seq	Volume	Units
2539	null	uL
358	100	mg

Standard Log Report

Standards Log Information for Standard #493

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	I528-10000

Notes:

MSV I-528 @ 10000 ug/mL

Compound Name and Concentration for Standard #493

Compound Name	Concentration	Compound Name	Concentration
Haloether 528	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #493

Composed of Standard Seq	Volume	Units
2539	null	uL
357	100	mg

Standard Log Report

Standards Log Information for Standard #492

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	I-508-10000

Notes:

MSV I-508 @ 10000 ug/mL

Compound Name and Concentration for Standard #492

Compound Name	Concentration	Compound Name	Concentration
Haloether 508	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #492

Composed of Standard Seq	Volume	Units
2539	null	uL
356	100	mg

Standard Log Report

Standards Log Information for Standard #491

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	I-428-10000

Notes:

MSV I-428 @ 10000 ug/mL

Compound Name and Concentration for Standard #491

Compound Name	Concentration	Compound Name	Concentration
Haloether 428	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #491

Composed of Standard Seq	Volume	Units
2539	null	uL
355	100	mg

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #490

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	I-427-10000

Notes:

MSV I-427 @ 10000 ug/mL

Compound Name and Concentration for Standard #490

Compound Name	Concentration	Compound Name	Concentration
Haloether 427	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #490

Composed of Standard Seq	Volume	Units
2539	null	uL
354	100	mg

Standard Log Report

Standards Log Information for Standard #489

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	I-421-10000

Notes:

MSV I-421 @ 10000 ug/mL

Compound Name and Concentration for Standard #489

Compound Name	Concentration	Compound Name	Concentration
Haloether 421	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #489

Composed of Standard Seq	Volume	Units
2539	null	uL
353	100	mg

Standard Log Report

Standards Log Information for Standard #488

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	01/01/2013	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	I-406-10000

Notes:

MSV I-406 @ 10000 ug/mL

Compound Name and Concentration for Standard #488

Compound Name	Concentration	Compound Name	Concentration
Haloether 406	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #488

Composed of Standard Seq	Volume	Units
2539	null	uL
352	100	mg

Standard Log Report

Standards Log Information for Standard #487

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	09/21/2011	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	I-229-10000

Notes:

MSV I-229 @ 10000 ug/mL

Compound Name and Concentration for Standard #487

Compound Name	Concentration	Compound Name	Concentration
Haloether 229	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #487

Composed of Standard Seq	Volume	Units
2539	null	uL
351	100	mg

Standard Log Report

Standards Log Information for Standard #486

WORKING STANDARD

Created By:	MLS	**Volume of Standard:**	10 mL	**Lot ID:**	NA
Create Date:	09/21/2011	**Manufacturer:**	N/A	**Part ID:**	N/A
Expire Date:		**Manufacturer Lot ID:**	N/A	**Standard ID:**	Iso10000

Notes:

MSV Isoflurane @ 10000 ug/mL

Compound Name and Concentration for Standard #486

Compound Name	Concentration	Compound Name	Concentration
Isoflurane	10000 ug/mL	Methanol	ug/mL

Composed of Information for Standard #486

Composed of Standard Seq	Volume	Units
2539	null	uL
476	100	mg

Standard Log Report

Standards Log Information for Standard #476

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20205
Create Date:	08/18/2009	**Manufacturer:**	Baxter PR	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-080824-22	**Standard ID:**	Iso-STK

Notes:

MSV Isoflurane HALO NEAT

Compound Name and Concentration for Standard #476

Compound Name	Concentration	Compound Name	Concentration
Isoflurane	1000000 mg/kg		

Standard Log Report

Standards Log Information for Standard #360

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20205
Create Date:	08/18/2009	**Manufacturer:**	Baxter Caribe	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-000426-17	**Standard ID:**	Enfluran STK

Notes:

MSV Enflurane HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #360

Compound Name	Concentration	Compound Name	Concentration
Enflurane	1000000 mg/kg		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #359

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	202513
Create Date:	08/18/2009	**Manufacturer:**	Baxter PPI	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-001212-45	**Standard ID:**	Halomar STK

Notes:

MSV Halomar HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #359

Compound Name	Concentration	Compound Name	Concentration
Halomar	1000000 mg/kg		

Standard Log Report

Standards Log Information for Standard #358

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20214
Create Date:	08/18/2009	**Manufacturer:**	Baxter Caribe	**Part ID:**	N/A
Expire Date:	09/20/2020	**Manufacturer Lot ID:**	B-98-002	**Standard ID:**	MOxyFl STK

Notes:

MSV Methoxyflurane HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #358

Compound Name	Concentration	Compound Name	Concentration
Methoxyflurane	1000000 mg/kg		

Standard Log Report

Standards Log Information for Standard #357

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20212
Create Date:	08/18/2009	**Manufacturer:**	Baxter GACC	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-030528-129	**Standard ID:**	I-528 STK

Notes:

MSV I-528 HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #357

Compound Name	Concentration	Compound Name	Concentration
Haloether 528	1000000 mg/kg		

Standard Log Report

Standards Log Information for Standard #356

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20211
Create Date:	08/18/2009	**Manufacturer:**	Baxter PPI	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-010109-52	**Standard ID:**	I-508 STK

Notes:

MSV I-508 HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #356

Compound Name	Concentration	Compound Name	Concentration
Haloether 508	1000000 mg/kg		

Standard Log Report

Standards Log Information for Standard #355

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20210
Create Date:	08/18/2009	**Manufacturer:**	Baxter ACC	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-020314-100	**Standard ID:**	I-428 STK

Notes:

MSV I-428 HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #355

Compound Name	Concentration	Compound Name	Concentration
Haloether 428	1000000 mg/kg		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #354

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20209
Create Date:	08/18/2009	**Manufacturer:**	Baxter GACC	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-040419-22	**Standard ID:**	I-427 STK

Notes:

MSV I-227 HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #354

Compound Name	Concentration	Compound Name	Concentration
Haloether 427	1000000 mg/kg		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #353

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20208
Create Date:	08/18/2009	**Manufacturer:**	Baxter ACC	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-070810-3	**Standard ID:**	I-421STK

Notes:

MSV I-421 HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #353

Compound Name	Concentration	Compound Name	Concentration
Haloether 421	1000000 mg/kg		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #352

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20207
Create Date:	08/18/2009	**Manufacturer:**	Baxter ACC	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-070712-156	**Standard ID:**	I-406-STK

Notes:

MSV I-406 HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #352

Compound Name	Concentration	Compound Name	Concentration
Haloether 406	1000000 mg/kg		

The standards listed are from Pace's New Orleans Laboratory.

Standard Log Report

Standards Log Information for Standard #351

INDIVIDUAL STANDARD

Created By:	MLS	**Volume of Standard:**		**Lot ID:**	20206
Create Date:	08/18/2009	**Manufacturer:**	Baxter PR	**Part ID:**	N/A
Expire Date:	09/20/2040	**Manufacturer Lot ID:**	RS-080824-22	**Standard ID:**	I-229 STK

Notes:

MSV I-229 HALO NEAT No EXP-per client

Compound Name and Concentration for Standard #351

Compound Name	Concentration	Compound Name	Concentration
Haloether 229	1000000 mg/kg		

Standard Log Report

Standards Log Information for Standard #10

STOCK STANDARD

Created By:	TAE	**Volume of Standard:**	1000 mL	**Lot ID:**	DI WATER
Create Date:	03/05/2013	**Manufacturer:**	PACE	**Part ID:**	N/A
Expire Date:	12/30/2020	**Manufacturer Lot ID:**	DI WATER	**Standard ID:**	RGNT389

Notes:

DI WATER

Compound Name and Concentration for Standard #10

Compound Name	Concentration	Compound Name	Concentration
DI Water	mg/L		

The standards listed are from Pace's New Orleans Laboratory.

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CERTIFICATE OF ANALYSIS 2008

CERTIFICATE NUMBER: **1005262**

Compound: Enflurane
Lot No.: RS-000426-17
Vendor: Baxter Caribe
Vendor lot No.: G-98-015
Date Received : 2/2000
Date of Manufacture: 2/2000

RETEST DATE: 1/2010
STORAGE: Store at room temperature

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	26127:180
Water	NMT 0.1 %	0.03 %	25886:140-142
Purity	NLT 99.0 %	99.98 %	26127:144-154, 172-180

Analytical checked by: _____ Date: 1/11/08

Analytical approved by: _____ Date: 01/14/08

Quality Assurance-Approved by: _____ Date: 04/25/08

Remarks: Reference Standard Retest
Comments:

20205
REC.01/13/14 BY MLS
Exp. __/__/__ By __
Open __/__/__ By __

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Analyst _____

AUG 18 2009

8/18/09 # of Ampules 10mls

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STD 351

CERTIFICATE OF ANALYSIS 2007

CERTIFICATE NUMBER: **1005245**

Compound: I-229
Lot No.: RS-070827-4
Vendor: Baxter Caribe
Vendor lot No.: P1221A-07-088 FV1212
Date Received : 8/2007
Date of Manufacture: NA

RETEST DATE: 1/2010
STORAGE: Store refrigerated at 2-8°C

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	25885:129
Water	NMT 0.2 %	0.1 %	25886:60,68-73
Identification			
FTIR	Corresponds to standard	Corresponds to standard	25886:61, 66, 67
MS	Conforms to structure	Conforms to structure	25890:102-109
NMR	Conforms to structure	Conforms to structure	25347:174
ELEMENTAL	± 0.3 % C,H %C: 24.0 %H: 2.0	%C: 24.2 %H: 1.7	RML:SOP:169
Purity	NLT 98.0 %	100.0 %	25885:129, 130, 133, 168-176

Analytical checked by: _____ Date: 1/8/08

Analytical approved by: _____ Date: 1/8/08

Quality Assurance-Approved by: K. Smith Date: 01/09/08

20206
REC.01/13/14 BY MLS
Exp. __/__/__ By __
Open __/__/__ By __

Remarks: Reference Standard Qualification
Comments:

Analyst _____
8/18/09 AUG 18 2009
# of Ampules 10 m/s
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CERTIFICATE OF ANALYSIS 2007

CERTIFICATE NUMBER: **1005210**

Compound: I-406
Lot No.: RS-070712-156
Vendor: Baxter ACC
Vendor lot No.:25614-761
Date Received : 7/2007
Date of Manufacture: 7/2007

RETEST DATE: 7/2010
STORAGE: Store refrigerated

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	25878:200
Water	For information	0.01 %	25634:185-188
Identification			
FTIR	Corresponds to standard	Corresponds to standard	25634:189,190
MS	Conforms to structure	Conforms to structure	25880:110-121
NMR	Conforms to structure	Conforms to structure	25347:131
ELEMENTAL	± 0.3 % C,H %C: 16.5 %H: 0.5	%C: 16.7 %H: 0.7	RML:SOP:169
Purity	NLT 98.0 %	99.2 %	25878:169, 176-178, 192-200

Analytical checked by: _____ Date: 8/7/07

Analytical approved by: _____ Date: 8/8/07

Quality Assurance-Approved by: _____ Date: 9/10/07

20207
REC. 01/13/14 BY MLS
Exp. --/--/-- BY --
Open --/--/-- BY --

Analyst _____
AUG 18 2009
8/18/09
# of Ampules 10 mls
Page # 521 337

Remarks: Reference Standard Qualification
Comments:

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CERTIFICATE OF ANALYSIS 2007

CERTIFICATE NUMBER: **1005234**

Compound: I-421
Lot No.: RS-070810-3
Vendor: Baxter ACC
Vendor lot No.: GH25347-139
Date Received : 8/2007
Date of Manufacture: 8/2007

RETEST DATE: 1/2010
STORAGE: Store refrigerated at 2-8°C

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	25885:121
Water	For information	0.02 %	25886:60. 68-73
Identification			
FTIR	Corresponds to standard	Corresponds to standard	25886:61, 66, 67
MS	Conforms to structure	Conforms to structure	25890:102-109
NMR	Conforms to structure	Conforms to structure	25347:173
ELEMENTAL	± 0.3 % C,H %C: 17.9 %H: 1.0	%C: 17.9 %H: 0.8	RML:SOP:169
Purity	NLT 98.0 %	98.6 %	25885:121,122,127, 128,134-145

Analytical checked by: _____ Date: 1/14/08

Analytical approved by: _____ Date: 1/14/08

Quality Assurance-Approved by: K. Smith Date: 1/24/08

20208
REC.01/13/14 BY MLS
Exp. __/__/__ By --
Open __/__/__ By --

Remarks: Reference Standard Qualification
Comments:

Analyst _____
8/18/09
AUG 18 2009
# of Ampules 5 mls
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Baxter
Healthcare Corporation
Global Anesthesia & Critical Care

95 Spring Street
New Providence NJ 07974

CERTIFICATE OF ANALYSIS 2009

CERTIFICATE NUMBER: 1005361

Compound: I-427
Lot No.: RS-040419-22
Vendor: Baxter GACC
Vendor lot No.: LR23397-83
Date Received : 4/2004
Date of Manufacture: 4/2004

RETEST DATE: 4/2010
STORAGE: Store refrigerated at 2°C-8°C

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	26539:180
Water	For Information	0.01%	26531:161-162
Purity	NLT 98.0%	99.2%	26539:176-178;180-181

Analytical approved by: [signature] Date: April/28/2009
[RS Manager or designee]

Quality Assurance-Approved by: [signature] Date: 4/23/09

Remarks: Reference Standard Qualification
Comments: RSP00335R1,A,2

20209
REC. 01/13/14 BY MLS
Exp. --/--/-- By --
Open --/--/-- By --

Analyst [signature]
AUG 18 2009
[signature] 8/18/09 5 m/s
# of Ampules
Page # 521-339

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CERTIFICATE OF ANALYSIS 2009

CERTIFICATE NUMBER: 1005337

Compound: I-428
Lot No.: RS-020314-100
Vendor: Baxter ACC
Vendor lot No.: LR22140-125
Date Received : 3/2002
Date of Manufacture: 3/2002

RETEST DATE: 1/2010
STORAGE: Store refrigerated at 2°C - 8°C

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	26537:36
Water	For Information Only	0.01%	26531:50-51; 54-56
Purity	NLT 98.0 %	98.5%	26537:24-27; 33-37

Analytical approved by: [signature] Date: Jan-23-2009
[RS Manager or designee]

Quality Assurance-Approved by: [signature] Date: 1/26/09

20210
REC. 01/13/14 BY MLS
Exp. --/--/-- By --
Open --/--/-- By --

Analyst [signature]
AUG 18 2009
# of Ampules 5 m/s
Page # 521-339
40

Remarks: Reference Standard Retest
Comments: RSP00410R2,A,1

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CERTIFICATE OF ANALYSIS 2009

CERTIFICATE NUMBER: 1005341

Compound: I-508
Lot No.: RS-010109-52
Vendor: Baxter PPI
Vendor lot No.: 21684-42
Date Received : 1/2001
Date of Manufacture: 1/2001

RETEST DATE: 1/2011
STORAGE: Store refrigerated at 2°C-8°C

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	26537:45
Purity	NLT 98.0%	99.5%	26537:38-40;44-46

Analytical approved by: SmallD
[RS Manager or designee]
Date: Jan 23 2009

Quality Assurance-Approved by:
Date: 1/26/09

20211
REC.01/13/14 BY MLS
Exp. --/--/-- By --
Open --/--/-- By --

Remarks: Reference Standard Retest
Comments: RSP00414R1,A,1

Analyst
AUG 18 2009
# of Ampules 10 m/s
Page # 521-3401

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CERTIFICATE OF ANALYSIS 2009

CERTIFICATE NUMBER: 1005371

Compound: I-528
Lot No.: RS-030528-129
Vendor: Baxter GACC
Vendor lot No.: LR-22805-191
Date Received : 5/2003
Date of Manufacture: 5/2003

RETEST DATE: 6/2010
STORAGE: Store refrigerated at 2°C – 8°C

TEST	ACCEPTANCE CRITERIA	RESULTS	REFERENCE
Appearance	Clear,colorless liquid	Clear,colorless liquid	26746:25
Purity	NLT 98.0 %	99.6%	26746-:22-26

Analytical approved by: [RS Manager or designee] _____ Date: June 25, 2009

Quality Assurance-Approved by: _____ Date: 25 June 2009

Remarks: Reference Standard Retest
Comments: RSP00416R3,A,1

20212
REC.01/13/14 BY MLS
Exp. --/--/-- BY --
Open --/--/-- BY --

Analyst _____
AUG 18 2009
Amount of Ampules 10 mls
Page # 521-342

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CERTIFICATE OF ANALYSIS

CERTIFICATE NUMBER: **1004985**

Compound: Methoxyflurane (BHT free)
Lot No.: B-98-002
Vendor: Baxter Caribe
Vendor lot No.: B-98-002
Date Received: 9/1998
Date of Manufacture: NA

RETEST DATE: 10/2010
STORAGE: Store in the freezer (-20°C)

TEST	ACCEPTANCE CRITERIA	RESULTS	DATE COMPLETED	REFERENCE
Appearance	Clear, colorless liquid	Clear, colorless liquid	10/31/05	25147:23
Water	NMT 0.1 %	0.02 %	10/11/05	25144:74
Purity	NLT 99.0 %	100.0 %	10/31/05	25147:23-28

Analytical checked by: _____ Date: 11-1-05

Analytical approved by: _____ Date: 11/1/05

Quality Assurance-Approved by: _____ Date: 12/15/05

20214
REC.01/13/14 BY MLS
Exp. __/__/__ By __
Open __/__/__ By __

Remarks: Reference Standard Retest
Comments:

Analyst _____
AUG 18 2009
~~# of Ampules~~ 5mls
Page # 521-3434
8/18/09

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Date Received: _____

Certificate of Analysis

Rev 0 **Page 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120005-05-P	256730	≤ -10 Degrees C	P/T Methanol	3-Aug-2018	8260B-M Surrogate Solution, 2,500 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
dibromofluoromethane	1868-53-7	98.4	136.282.6P	2499 +/- 25.56	mg/L
4-bromofluorobenzene (BFB)	460-00-4	99.9	135.1.3.1P	2535 +/- 25.92	mg/L
toluene-d8	2037-26-5	99.9	137.1.8P	2501 +/- 25.58	mg/L

EP MYL
~~201211~~ 8/10/15
21624

Certified By: Holly Tindal

Holly Tindal

Manufacture Date 30-Jul-2015

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

201211
REC. 08/10/15 BY MLS
Exp. __/__/__ By __
Open __/__/__ By __

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Rev 0 **Page 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120005-05-P	256730	≤ -10 Degrees C	P/T Methanol	3-Aug-2018	8260B-M Surrogate Solution, 2,500 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
dibromofluoromethane	1868-53-7	98.4	136.282.6P	2499 +/- 25.56	mg/L
4-bromofluorobenzene (BFB)	460-00-4	99.9	135.1.3.1P	2535 +/- 25.92	mg/L
toluene-d8	2037-26-5	99.9	137.1.8P	2501 +/- 25.58	mg/L

EP
31260

Certified By: Holly Tindal

Holly Tindal

Manufacture Date 30-Jul-2015

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

201593
REC. 04/05/16 BY MLS
Exp. __/__/__ By __
Open __/__/__ By __

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Rev 0 **Page 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120404-01	294907	≤ -10 Degrees C	P/T Methanol	14-Dec-2018	VOC Solution 10-1, 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
acetone	67-64-1	99.9	196.29.1.1P	1999 +/- 28.83	mg/L
2-hexanone	591-78-6	99.3	199.7.1P	2003 +/- 20.91	mg/L
isobutyl alcohol	78-83-1	100	220.29.1P	2002 +/- 28.87	mg/L
methyl acetate	79-20-9	100	439.1.1P	2002 +/- 28.88	mg/L
cyclohexane	110-82-7	99.9	308.1.4P	2029 +/- 29.27	mg/L
methyl t-butyl ether	1634-04-4	99.96	208.24.2P	1999 +/- 20.77	mg/L
n-hexane (C6)	110-54-3	98	620.24.1P	1998 +/- 28.81	mg/L
2-butanone (MEK)	78-93-3	99.9	197.18.1P	1999 +/- 28.83	mg/L
methyl cyclohexane	108-87-2	99.6	390.1.1P	2005 +/- 28.92	mg/L
4-methyl-2-pentanone (MIBK)	108-10-1	99.6	198.1.3P	1997 +/- 28.8	mg/L

EP 41537

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 14-Dec-2016

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

201941
REC. 12/22/16 BY MLS
Exp. __/__/__ By __
Open __/__/__ By __

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Date Received: _____

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Rev 0 **Page 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120404-01-SS	294909	≤ -10 °C	P/T Methanol	14-Dec-2018	VOC Solution, Second Source, 10-1, 2,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
acetone	67-64-1	99.9	196.29.1S	2001 +/- 28.85	mg/L
2-hexanone	591-78-6	99.9	199.8.1S	2008 +/- 28.96	mg/L
isobutyl alcohol	78-83-1	99.8	220.18.1.1S	2001 +/- 20.89	mg/L
methyl acetate	79-20-9	99.5	439.8.1S	2019 +/- 21.58	mg/L
cyclohexane	110-82-7	99.9	308.1.4.1S	2007 +/- 28.94	mg/L
methyl t-butyl ether	1634-04-4	99.96	208.24.2.1S	1999 +/- 20.77	mg/L
n-hexane (C6)	110-54-3	98	620.24.1.1S	2017 +/- 29.09	mg/L
2-butanone (MEK)	78-93-3	99.9	197.8.1S	2005 +/- 28.91	mg/L
methylcyclohexane	108-87-2	99.9	390.1.3S	2000 +/- 28.84	mg/L
ethyl-2-pentanone (MIBK)	108-10-1	99.6	198.1.3.1S	2000 +/- 28.84	mg/L

EP ~~41539~~ 41540 MH 12/22/16

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 14-Dec-2016

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

201942
Rec 12/22/16 By MLS
Exp. __/__/__ By __
Open __/__/__ By __

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

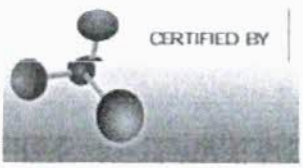
Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained

Catalog Number	A453	Quality Test / Release Date	11/21/2016
Lot Number	166879	Expiration Date	Apr/18
Description	METHANOL, PURGE & TRAP GRADE		
Country of Origin	United States		
Chemical Origin	Organic - synthetic		
BSE/TSE Comment	This product is derived from petroleum products. It does not contain any materials that are of human or animal origin, nor does it come into contact with such materials during the manufacturing process. Therefore, to the best of our knowledge, there is no potential for BSE or TSE to be present in this product.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	clear, colorless liquid
2-BUTANONE	ppb	<= 50	<50
ACETONE	ppb	<= 50	<50
AROMATIC COMPOUNDS	ppb	<= 10	<10
ASSAY	%	>= 99.9	99.99
CARBON TETRACHLORIDE	ppb	<= 10	<10
CHLOROFORM	ppb	<= 10	<10
EVAPORATION RESIDUE	ppm	<= 1	<0.5
HEPTANE	ppb	<= 50	<50
HEXANE	ppb	<= 50	<50
ISO-OCTANE	ppb	<= 50	<50
METHYLENE CHLORIDE	ppb	<= 10	<10
METHYL ISO-AMYL KETONE	ppb	<= 50	<50
OTHER DETECTABLE ALKANES	ppb	<= 50	<50
OTHER DETECTABLE CHLOROHYDROCARBONS	ppb	<= 10	<10
OTHER DETECTABLE KETONES	ppb	<= 50	<50
OTHER DETECTABLE PEAKS AS HEXANE	ppb	<= 50	<50
PENTANE	ppb	<= 50	<50
TITRATABLE ACID	mEq/g	<= 0.0003	<0.0003
TITRATABLE BASE	mEq/g	<= 0.0002	<0.0002
VOLATILE ORGANIC CMPDS (EPA8260B OR EQUIV)	PASS/FAIL	= PASS TEST	PASS TEST
WATER (KARL FISCHER)	%	<= 0.2	0.15



Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis BPF

EP 42700

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
*Based on suggested storage condition.

201982
REC. 01/25/17 BY MLS
Exp. --/--/-- By --
Open --/--/-- By --

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Date Received: _____

Certificate of Analysis

Rev 0 **Page 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120302-02-P	298023	≤ -10 °C	P/T Methanol	27-Jan-2019	8260 Internal Standard Solution, 2,500 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
chlorobenzene-d_5	3114-55-4	99.7	128.1.5.1P	2514 +/- 5.96	mg/L
1,4-difluorobenzene	540-36-3	98.9	129.8.1.1P	2502 +/- 25.59	mg/L
pentafluorobenzene	363-72-4	99.7	131.1.5P	2532 +/- 25.89	mg/L
1,4-dichlorobenzene-d_4	3855-82-1	99.5	3.1.7P	2525 +/- 25.82	mg/L

EP 43122

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 27-Jan-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

202006
REC 02/06/17 BY MLS
Exp. __/__/__ By __
Open __/__/__ By __

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 562275 **Lot No.:** A0121170

Description : Custom 8260 Gases Standard

Custom 8260 Gases Standard 50µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2021 **Storage:** 0°C or colder

202155
REC. 06/02/17 BY RMP
Exp. __/__/__ By --
Open __/__/__ By --

47377
8260GRS-SPK
LOT 202155
EXP 31-AUG-21

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	49.5 µg/mL	+/- 0.4337 +/- 2.7954 +/- 2.8600	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG7976V) **Purity** 99%	50.8 µg/mL	+/- 0.6436 +/- 2.9033 +/- 2.9686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 25LPST) **Purity** 99%	50.0 µg/mL	+/- 0.7055 +/- 2.8759 +/- 2.9398	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	50.1 µg/mL	+/- 0.7145 +/- 2.8843 +/- 2.9484	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	50.2 µg/mL	+/- 0.8655 +/- 2.9294 +/- 2.9927	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 (Lot SHBF6387V) **Purity** 99%	50.3 µg/mL	+/- 0.5158 +/- 2.8518 +/- 2.9171	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

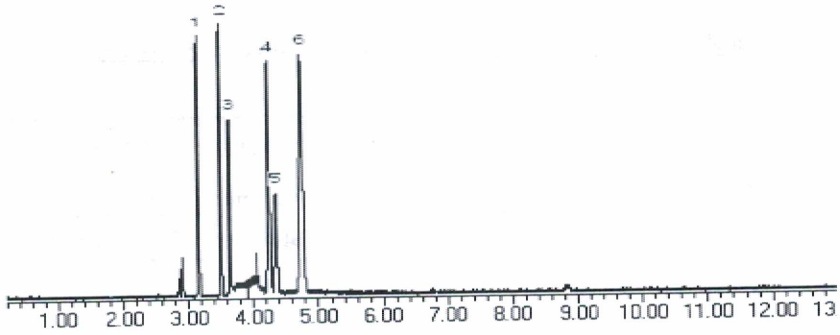
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 22-Aug-2016 **Balance:** 1127510105

Date Passed: 26-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 562275 **Lot No.:** A0127886

Description : Custom 8260 Gases Standard

Custom 8260 Gases Standard 50µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2022 **Storage:** 0°C or colder

202156
REC 06/02/17 BY RMP
Exp __/__/__ By __
Open __/__/__ By __

47383
8260GAS-SPK
LOT 202155
EXP 31-MAY-22

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot Q167-08) Purity 99%	49.5 µg/mL	+/- 0.7216 +/- 2.8552 +/- 2.9184	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBG9707V) Purity 99%	49.4 µg/mL	+/- 0.9595 +/- 2.9194 +/- 2.9811	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 1026101231B1) Purity 99%	50.1 µg/mL	+/- 0.7931 +/- 2.9021 +/- 2.9657	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	50.8 µg/mL	+/- 2.1770 +/- 3.5746 +/- 3.6281	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot 23593) Purity 99%	50.1 µg/mL	+/- 1.0109 +/- 2.9727 +/- 3.0350	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 (Lot SHBG7531V) Purity 99%	49.6 µg/mL	+/- 1.2630 +/- 3.0410 +/- 3.1007	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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Date Received: _____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120404-01	294907	≤ -10 Degrees C	P/T Methanol	14-Dec-2018	VOC Solution 10-1, 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
acetone	67-64-1	99.9	196.29.1.1P	1999 +/- 28.83	mg/L
2-butanone (MEK)	78-93-3	99.9	197.18.1P	1999 +/- 28.83	mg/L
cyclohexane	110-82-7	99.9	308.1.4P	2029 +/- 29.27	mg/L
n-hexane (C6)	110-54-3	98	620.24.1P	1998 +/- 28.81	mg/L
2-hexanone	591-78-6	99.3	199.7.1P	2003 +/- 20.91	mg/L
isobutyl alcohol	78-83-1	100	220.29.1P	2002 +/- 28.87	mg/L
methyl acetate	79-20-9	100	439.1.1P	2002 +/- 28.88	mg/L
methyl cyclohexane	108-87-2	99.6	390.1.1P	2005 +/- 28.92	mg/L
4-methyl-2-pentanone (MIBK)	108-10-1	99.6	198.1.3P	1997 +/- 28.8	mg/L
methyl t-butyl ether	1634-04-4	99.96	208.24.2P	1999 +/- 20.77	mg/L

202188
REC.06/30/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

48409
8260VOA2-STK
LOT 202188
EXP 14-DEC-18

Certified By: Madeline Luby

Madeline Luby

Manufacture Date *14-Dec-2016*

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Date Received: _____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120391-02	296144	≤ -10 °C	P/T Methanol	4-Jan-2019	8260 VOC Solution 79-2, 2,000/4,000/20,000/40,000 mg/L, 1 ml

202189
REC.06/30/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

48408
8260VOA1-STK
LOT 202189
EXP 04-JAN-19

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
2-nitropropane	79-46-9	99.4	219.8.1P	2002 +/- 28.88	mg/L
acetonitrile	75-05-8	99.5	204.10.4P	20040 +/- 209.23	mg/L
acrylonitrile	107-13-1	99	210.1.7P	2002 +/- 23.08	mg/L
allyl chloride	107-05-1	98.1	227.29.1.1P	2010 +/- 45.31	mg/L
benzene	71-43-2	99.7	146.18.4P	2001 +/- 20.89	mg/L
bromobenzene	108-86-1	99.3	147.1.2P	1999 +/- 28.83	mg/L
bromochloromethane	74-97-5	99.7	148.1.3P	1999 +/- 20.87	mg/L
2-bromo-1-chloropropane	3017-95-6	97.8	250.282.1.1P	1980 +/- 28.56	mg/L
bromodichloromethane	75-27-4	98	149.1.7P	1997 +/- 28.8	mg/L
bromoform	75-25-2	99	150.8.1P	2020 +/- 23.29	mg/L
n-butylbenzene	104-51-8	99.2	151.7.3P	2005 +/- 20.93	mg/L
sec-butylbenzene	135-98-8	99.9	152.7.1.2P	1998 +/- 20.85	mg/L
tert-butylbenzene	98-06-6	99.9	153.1.4P	2003 +/- 20.91	mg/L
carbon disulfide	75-15-0	99.9	200.18.1P	2018 +/- 21.06	mg/L
carbon tetrachloride	56-23-5	99.9	154.1.2P	2002 +/- 28.87	mg/L
chlorobenzene	108-90-7	99.9	155.29.1P	2002 +/- 20.9	mg/L
2-chloroethanol	107-07-3	99.7	217.1.1P	1998 +/- 28.82	mg/L
chloroform	67-66-3	99.9	156.1.5P	2020 +/- 21.09	mg/L
chloroprene	126-99-8	98	315.5.13.3.1P	1990 +/- 20.77	mg/L
2-chlorotoluene	95-49-8	99.5	157.7.1P	1998 +/- 20.85	mg/L
4-chlorotoluene	106-43-4	99.8	158.9.2P	2002 +/- 28.87	mg/L
cis-1,2-dichloroethylene	156-59-2	99.5	166.7.1.2P	2035 +/- 21.24	mg/L

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 4-Jan-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: 120391-02 **Lot No.:** 296144 **Expiration Date:** 4-Jan-2019

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
dibromochloromethane	124-48-1	98.8	159.29.1.1P	2003 +/- 20.91	mg/L
1,2-dibromo-3-chloropropane	96-12-8	98	160.7.2P	2011 +/- 20.99	mg/L
1,2-dibromoethane	106-93-4	99.8	161.1.2P	2009 +/- 28.97	mg/L
dibromomethane	74-95-3	99.8	162.1.2P	2004 +/- 28.9	mg/L
1,2-dichlorobenzene	95-50-1	99.5	43.1.2P	2000 +/- 20.88	mg/L
1,3-dichlorobenzene	541-73-1	99.9	44.9.2P	1999 +/- 20.87	mg/L
1,4-dichlorobenzene	106-46-7	99.9	45.29.1P	2009 +/- 20.97	mg/L
1,4-dichlorobutane	110-56-5	99.9	320.1.1P	2006 +/- 45.22	mg/L
cis-1,4-dichloro-2-butene	1476-11-5	96.3	209.271.1P	4001 +/- 90.18	mg/L
trans-1,4-dichloro-2-butene	110-57-6	95	201.1.13P	4017 +/- 41.94	mg/L
1,1-dichloroethane	75-34-3	98.9	163.7.2.1P	2012 +/- 21	mg/L
1,2-dichloroethane	107-06-2	99.9	164.29.1P	2006 +/- 20.94	mg/L
1,1-dichloroethylene	75-35-4	100	165.1.2.1P	2038 +/- 29.39	mg/L
trans-1,2-dichloroethylene	156-60-5	99.1	167.7.1P	1967 +/- 20.53	mg/L
1,2-dichloropropane	78-87-5	99.7	168.8.1P	2000 +/- 28.84	mg/L
1,3-dichloropropane	142-28-9	99.2	169.7.1P	2000 +/- 20.88	mg/L
2,2-dichloropropane	594-20-7	98.5	170.1.8P	1999 +/- 20.87	mg/L
1,1-dichloropropylene	563-58-6	97.9	171.3.7P	2000 +/- 23.06	mg/L
cis-1,3-dichloropropylene	10061-01-5	99.5	172.7.3P	2009 +/- 28.97	mg/L
trans-1,3-dichloropropylene	10061-02-6	99	173.7.4.2P	2001 +/- 20.89	mg/L
1,4-dioxane	123-91-1	99.3	223.1.2P	39830 +/- 574.43	mg/L
ethyl ether	60-29-7	99.7	226.1.2P	1998 +/- 28.81	mg/L
ethyl methacrylate	97-63-2	99.1	216.1.1P	1999 +/- 28.84	mg/L
ethylbenzene	100-41-4	99.9	174.8.2P	2001 +/- 28.85	mg/L
hexachlorobutadiene	87-68-3	97.7	47.29.2P	1996 +/- 20.83	mg/L
iodomethane	74-88-4	100	203.1.2P	2016 +/- 29.07	mg/L
isobutyl alcohol	78-83-1	100	220.29.1P	40100 +/- 578.33	mg/L
isopropylbenzene	98-82-8	99.8	176.9.2.1P	1998 +/- 28.81	mg/L
4-isopropyltoluene	99-87-6	99.7	177.9.2P	2000 +/- 28.84	mg/L
methyl acrylonitrile	126-98-7	99.8	212.8.1.1P	20020 +/- 288.73	mg/L

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 4-Jan-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: 120391-02 **Lot No.:** 296144 **Expiration Date:** 4-Jan-2019

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
methyl methacrylate	80-62-6	100	231.1.2P	3996 +/- 57.63	mg/L
methyl acrylate	96-33-3	99.9	349.1.1P	2019 +/- 29.12	mg/L
methylene chloride	75-09-2	99.9	178.24.2P	2002 +/- 20.82	mg/L
naphthalene	91-20-3	99.9	26.29.1P	2000 +/- 28.84	mg/L
nitrobenzene	98-95-3	100	94.9.2.1P	2011 +/- 29.01	mg/L
pentachloroethane	76-01-7	98.8	52.3.4P	2001 +/- 28.85	mg/L
propionitrile	107-12-0	99.5	218.1.3P	19960 +/- 208.39	mg/L
n-propylbenzene	103-65-1	100	179.1.5P	2002 +/- 20.9	mg/L
styrene	100-42-5	99.9	180.1.7P	2007 +/- 28.94	mg/L
1,1,1,2-tetrachloroethane	630-20-6	99.5	181.7.2.3P	2005 +/- 20.93	mg/L
1,1,2,2-tetrachloroethane	79-34-5	99.4	182.8.2P	2003 +/- 28.88	mg/L
tetrachloroethylene	127-18-4	100	183.1.2P	2019 +/- 20.98	mg/L
tetrahydrofuran	109-99-9	99.8	299.1.1P	2002 +/- 28.87	mg/L
toluene	108-88-3	99.9	184.9.1P	1999 +/- 28.83	mg/L
1,2,3-trichlorobenzene	87-61-6	100	185.1.1.5P	2011 +/- 23.19	mg/L
1,2,4-trichlorobenzene	120-82-1	99.4	54.3.2P	2001 +/- 23.07	mg/L
1,1,1-trichloroethane	71-55-6	99	187.1.1P	1998 +/- 28.81	mg/L
1,1,2-trichloroethane	79-00-5	99.6	195.7.1.3P	2000 +/- 20.88	mg/L
trichloroethylene	79-01-6	98.1	188.29.1P	1998 +/- 28.81	mg/L
1,2,3-trichloropropane	96-18-4	99.6	189.1.2P	2006 +/- 28.93	mg/L
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	99.9	270.158.1P	2009 +/- 28.97	mg/L
1,2,4-trimethylbenzene	95-63-6	99.2	190.24.1.1P	2001 +/- 28.85	mg/L
1,3,5-trimethylbenzene	108-67-8	99.7	191.9.2.1P	2003 +/- 28.88	mg/L
m-xylene	108-38-3	99.7	193.7.1P	2000 +/- 20.88	mg/L
o-xylene	95-47-6	99.5	192.1.3P	1997 +/- 28.8	mg/L
p-xylene	106-42-3	99	194.24.1.1P	1999 +/- 23.05	mg/L

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 4-Jan-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetriclly.

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Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120016-05	298022	≤ -10 °C	P/T Methanol	4-Feb-2020	Method 8260 Gases, 50 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
bromomethane	74-83-9	99.5	139.1.2.1P	50.29 +/- .53	mg/L
chloroethane	75-00-3	99.7	141.1.2P	50.12 +/- .52	mg/L
chloromethane	74-87-3	99	140.158.1P	49.8 +/- .71	mg/L
dichlorodifluoromethane	75-71-8	99	142.158.2.3P	50.73 +/- .73	mg/L
trichlorofluoromethane	75-69-4	99	144.1.3P	50.07 +/- .59	mg/L
vinyl chloride	75-01-4	99	143.158.1.1P	49.81 +/- .71	mg/L

202350
REC 10/09/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

52845
8260GAS-STK
LOT 202350
EXP 04-FEB-20

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 30-Jan-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120391-02-SS	294912	≤ -10 Degrees C	P/T Methanol	14-Dec-2018	8260 VOC Solution 79-2 (Second Source), 2,000/4,000/20,000/40,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
2-nitropropane	79-46-9	99.5	219.8.1.1S	1998 +/- 28.82	mg/L
acetonitrile	75-05-8	99.9	204.1.1.1S	20000 +/- 208.08	mg/L
acrylonitrile	107-13-1	99	210.9.2S	2001 +/- 23.07	mg/L
allyl chloride	107-05-1	98.1	227.29.1S	2037 +/- 29.44	mg/L
benzene	71-43-2	99.9	146.18.3.1S	2003 +/- 20.91	mg/L
bromobenzene	108-86-1	99.9	147.8.1S	2017 +/- 29.09	mg/L
bromochloromethane	74-97-5	99.7	148.1.3.1S	2004 +/- 20.92	mg/L
2-bromo-1-chloropropane	3017-95-6	98.4	250.115.1.1S	1968 +/- 20.06	mg/L
bromodichloromethane	75-27-4	98	149.1.7.1S	1970 +/- 28.41	mg/L
bromoform	75-25-2	99.4	150.7.1S	2027 +/- 29.23	mg/L
n-butylbenzene	104-51-8	99.2	151.7.3.1S	1999 +/- 20.87	mg/L
sec-butylbenzene	135-98-8	99.9	152.7.1.2.1S	2015 +/- 21.03	mg/L
tert-butylbenzene	98-06-6	99.8	153.9.1S	2005 +/- 28.91	mg/L
carbon disulfide	75-15-0	99.9	200.25.1S	1998 +/- 20.37	mg/L
carbon tetrachloride	56-23-5	100	154.24.1S	2003 +/- 28.88	mg/L
chlorobenzene	108-90-7	99.9	155.29.1.1S	2022 +/- 21.11	mg/L
2-chloroethanol	107-07-3	98.5	217.1.2S	2003 +/- 28.89	mg/L
chloroform	67-66-3	99.9	156.1.5.1S	1971 +/- 20.58	mg/L
chloroprene	126-99-8	98	315.5.13.3S	2028 +/- 21.17	mg/L
2-chlorotoluene	95-49-8	99.5	157.7.1.1S	1990 +/- 20.77	mg/L
4-chlorotoluene	106-43-4	99.8	158.9.2.1S	1985 +/- 28.63	mg/L
cis-1,2-dichloroethylene	156-59-2	99.5	166.7.1.2.1S	2001 +/- 20.89	mg/L

202353
REC. 10/09/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

52855
8260VOA1-STK
LOT 202353
EXP 14-DEC-18

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 14-Dec-2016

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: 120391-02-SS **Lot No.:** 294912 **Expiration Date:** 14-Dec-2018

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
dibromochloromethane	124-48-1	99.9	159.29.1.1S	1962 +/- 20.48	mg/L
1,2-dibromo-3-chloropropane	96-12-8	98	160.7.2.1S	2001 +/- 20.89	mg/L
1,2-dibromoethane	106-93-4	99.9	161.29.1S	2001 +/- 28.86	mg/L
dibromomethane	74-95-3	99.9	162.8.1S	2000 +/- 28.84	mg/L
1,2-dichlorobenzene	95-50-1	99.2	43.1.1.1S	2004 +/- 28.9	mg/L
1,3-dichlorobenzene	541-73-1	99.8	44.9.1S	1985 +/- 28.63	mg/L
1,4-dichlorobenzene	106-46-7	99.9	45.29.2.1S	1985 +/- 20.72	mg/L
1,4-dichlorobutane	110-56-5	99.8	320.1.1.1S	1996 +/- 28.85	mg/L
cis-1,4-dichloro-2-butene	1476-11-5	97.7	209.9.1S	4000 +/- 57.72	mg/L
trans-1,4-dichloro-2-butene	110-57-6	98.7	201.3.2.4S	4001 +/- 57.73	mg/L
1,1-dichloroethane	75-34-3	99.4	163.7.2.1S	2001 +/- 20.89	mg/L
1,2-dichloroethane	107-06-2	100	164.9.1S	2005 +/- 28.91	mg/L
1,1-dichloroethylene	75-35-4	100	165.1.2S	2006 +/- 23.13	mg/L
trans-1,2-dichloroethylene	156-60-5	99.3	167.1.1S	2005 +/- 28.91	mg/L
1,2-dichloropropane	78-87-5	99.7	168.8.1.1S	2002 +/- 28.87	mg/L
1,3-dichloropropane	142-28-9	99.2	169.7.1.1S	2010 +/- 20.98	mg/L
2,2-dichloropropane	594-20-7	97.6	170.1.7.1S	1962 +/- 20.48	mg/L
1,1-dichloropropylene	563-58-6	97.6	171.3.6.1S	2011 +/- 20.99	mg/L
cis-1,3-dichloropropylene	10061-01-5	99.5	172.7.3.1S	2022 +/- 29.16	mg/L
trans-1,3-dichloropropylene	10061-02-6	98.1	173.4.1.5.1S	2014 +/- 21.03	mg/L
1,4-dioxane	123-91-1	99.8	223.1.3.1S	40030 +/- 416.48	mg/L
ethyl ether	60-29-7	99.9	226.1.2.1S	1998 +/- 20.37	mg/L
ethyl methacrylate	97-63-2	99	216.1.1.1S	1996 +/- 23.03	mg/L
ethylbenzene	100-41-4	99.9	174.8.1.1S	2025 +/- 29.2	mg/L
hexachlorobutadiene	87-68-3	97.7	47.29.2.1S	2011 +/- 20.99	mg/L
iodomethane	74-88-4	99.9	203.1.3S	1998 +/- 28.82	mg/L
isobutyl alcohol	78-83-1	100	220.29.1.1S	40070 +/- 577.9	mg/L
isopropylbenzene	98-82-8	99.8	176.9.2S	2002 +/- 28.87	mg/L
4-isopropyltoluene	99-87-6	98.6	177.9.1S	1998 +/- 28.81	mg/L
methyl acrylonitrile	126-98-7	99.8	212.8.1S	20000 +/- 288.44	mg/L

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 14-Dec-2016

Second Source standards are prepared according to NELAC requirements.

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Certificate of Analysis

Catalog No.: 120391-02-SS **Lot No.:** 294912 **Expiration Date:** 14-Dec-2018

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
methyl methacrylate	80-62-6	98.5	231.8.1S	3999 +/- 57.67	mg/L
methyl acrylate	96-33-3	99	349.1.1.1S	2005 +/- 23.13	mg/L
methylene chloride	75-09-2	99.9	178.24.2.1S	2003 +/- 20.84	mg/L
naphthalene	91-20-3	99	26.29.1.1S	1996 +/- 23.02	mg/L
nitrobenzene	98-95-3	99	94.1.1.1S	2001 +/- 23.09	mg/L
pentachloroethane	76-01-7	98.8	52.3.4.1S	2000 +/- 28.85	mg/L
propionitrile	107-12-0	100	218.8.1S	20020 +/- 288.73	mg/L
n-propylbenzene	103-65-1	99.9	179.29.1S	2009 +/- 20.97	mg/L
styrene	100-42-5	99.9	180.1.7.1S	2027 +/- 29.23	mg/L
1,1,1,2-tetrachloroethane	630-20-6	99.5	181.7.2.3.1S	2013 +/- 21.02	mg/L
1,1,2,2-tetrachloroethane	79-34-5	99.4	182.8.2.1S	2001 +/- 28.86	mg/L
tetrachloroethylene	127-18-4	99.9	183.3.2S	2005 +/- 28.91	mg/L
tetrahydrofuran	109-99-9	99.5	299.3.2S	1990 +/- 20.29	mg/L
toluene	108-88-3	99.9	184.9.1.1S	2019 +/- 29.11	mg/L
1,2,3-trichlorobenzene	87-61-6	99	185.1.1.5.1S	1991 +/- 22.96	mg/L
1,2,4-trichlorobenzene	120-82-1	99.3	54.1.1.1S	2014 +/- 29.04	mg/L
1,1,1-trichloroethane	71-55-6	100	187.1.1.1S	2029 +/- 29.26	mg/L
1,1,2-trichloroethane	79-00-5	99.9	195.7.1.2S	2036 +/- 29.36	mg/L
trichloroethylene	79-01-6	98.1	188.29.1.1S	1967 +/- 28.37	mg/L
1,2,3-trichloropropane	96-18-4	98.7	189.7.1S	2001 +/- 28.86	mg/L
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	100	270.24.1S	2000 +/- 20.39	mg/L
1,2,4-trimethylbenzene	95-63-6	98	190.24.1S	2007 +/- 28.94	mg/L
1,3,5-trimethylbenzene	108-67-8	99.7	191.9.2S	2014 +/- 29.04	mg/L
m-xylene	108-38-3	99.8	193.9.1.1S	2011 +/- 29	mg/L
o-xylene	95-47-6	99.5	192.1.3.1S	2005 +/- 28.91	mg/L
p-xylene	106-42-3	99.9	194.24.1S	2011 +/- 29	mg/L

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 14-Dec-2016

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Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
120404-01-SS	294909	≤ -10 °C	P/T Methanol	14-Dec-2018	VOC Solution, Second Source, 10-1, 2,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
acetone	67-64-1	99.9	196.29.1S	2001 +/- 28.85	mg/L
2-butanone (MEK)	78-93-3	99.9	197.8.1S	2005 +/- 28.91	mg/L
cyclohexane	110-82-7	99.9	308.1.4.1S	2007 +/- 28.94	mg/L
n-hexane (C6)	110-54-3	98	620.24.1.1S	2017 +/- 29.09	mg/L
2-hexanone	591-78-6	99.9	199.8.1S	2008 +/- 28.96	mg/L
isobutyl alcohol	78-83-1	99.8	220.18.1.1S	2001 +/- 20.89	mg/L
methyl acetate	79-20-9	99.5	439.8.1S	2019 +/- 21.58	mg/L
methylcyclohexane	108-87-2	99.9	390.1.3S	2000 +/- 28.84	mg/L
4-methyl-2-pentanone (MIBK)	108-10-1	99.6	198.1.3.1S	2000 +/- 28.84	mg/L
methyl t-butyl ether	1634-04-4	99.96	208.24.2.1S	1999 +/- 20.77	mg/L

202354
REC 10/09/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

52856
VOA255-STK
LOT 202354
EXP 14-DEC-18

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 14-Dec-2016

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Date Received: _____

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Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020229-04-SS	323953	≤ -10 °C	P/T Methanol	2-Dec-2017	Acrolein Solution, Second Source, 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
acrolein	107-02-8	93.1	229.3.15.1S	2015 +/- 23.25	mg/L

202359
REC. 10/10/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

52940
Acrolein-STK
LOT 202359
EXP 02-DEC-17

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 3-Oct-2017

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020145-02-SS	290464	≤ -10 °C	P/T Methanol	18-Oct-2019	2-Chloroethyl Vinyl Ether Solution (Second Source), 2,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration
2-chloroethylvinyl ether	110-75-8	99.4	145.1.4.1S	1999 +/- 25.69 mg/L

Second Source standards are prepared according to NELAC requirements.

202361
REC.10/10/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

52948
8260CVE-STK
LOT 202361
EXP 18-OCT-19

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 13-Oct-2016

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetriclly.

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Certificate of Analysis

Rev 0 **Page 1 of 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020232-02-SS	323950	≤ -10 °C	P/T Methanol	1-Jan-2018	Vinyl Acetate Solution (Second Source), 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
vinyl acetate	108-05-4	99	232.271.2.1S	1998 +/- 20.79	mg/L

Second Source standards are prepared according to NELAC requirements.

202363
REC 10/10/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

52950
8260va-STK
LOT 202363
EXP 01-JAN-18

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 3-Oct-2017

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020229-04	329486	≤ -10 °C	P/T Methanol	26-Jan-2018	Acrolein Solution, 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
acrolein	107-02-8	94.5	229.3.16P	2002 +/- 23.1	mg/L

202430
REC. 11/30/17 BY RMP
Exp. __/__/__ By --
Open __/__/__ By --

54845
Acrolein-STK
LOT 202430
EXP 29-JAN-18

Certified By: Susan Mathews

Susan Mathews

Manufacture Date 27-Nov-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020229-04-SS	329488	≤ -10 °C	P/T Methanol	26-Jan-2018	Acrolein Solution, Second Source, 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration
acrolein	107-02-8	94.5	229.3.16.1S	1996 +/- 23.03 mg/L

202431
REC.11/30/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

54846
Acrolein-STK
LOT 202431
EXP 26-JAN-18

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetriclly.

Certified By: Susan Mat

Susan Mathews

Manufacture Date 27-Nov-2017

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Date Received: _____

Certificate of Analysis

Rev 0 **Page 1 of 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020145-02	326835	≤ -10 °C	P/T Methanol	6-Nov-2020	2-Chloroethyl Vinyl Ether Solution, 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
2-chloroethylvinyl ether	110-75-8	99.5	145.1.3P	1996 +/- 32.44	mg/L

202432
REC. 11/30/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

54847
826DCVE-STK
LOT 202432
EXP 06-NOV-20

Certified By: Madeline Luby

Madeline Luby

Manufacture Date 2-Nov-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Rev 0 **Page 1 of 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020145-02-SS	329483	≤ -10 °C	P/T Methanol	12-Sep-2020	2-Chloroethyl Vinyl Ether Solution (Second Source), 2,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
2-chloroethylvinyl ether	110-75-8	99.4	145.1.4.1S	1997 +/- 50.64	mg/L

Second Source standards are prepared according to NELAC requirements.

202433
REC. 11/30/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

54848
8260CVE-STK
LOT 202433
EXP 12-SEP-20

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetriclly.

Certified By: Susan Mathews

Susan Mathews

Manufacture Date 8-Sep-2017

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Date Received: _____

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Rev 0 **Page 1 of 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020232-02	329484	≤ -10 °C	P/T Methanol	25-Feb-2018	Vinyl Acetate Solution, 2000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
vinyl acetate	108-05-4	99	232.271.2P	2015 +/- 20.96	mg/L

202434
REC. 11/30/17 BY RMP
Exp. __/__/__ By --
Open __/__/__ By --

54856
826Dva-STK
LOT 202434
EXP 25-FEB-18

Certified By: Susan Mathews

Susan Mathews

Manufacture Date 27-Nov-2017

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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Date Received: _____

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Rev 0 **Page 1 of 1**

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
020232-02-SS	329485	≤ -10 °C	P/T Methanol	25-Feb-2018	Vinyl Acetate Solution (Second Source), 2,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
vinyl acetate	108-05-4	99	232.271.2.1S	2013 +/- 20.94	mg/L

Second Source standards are prepared according to NELAC requirements.

202435
REC. 11/30/17 BY RMP
Exp. __/__/__ By __
Open __/__/__ By __

54857
8260va-STK
LOT 202435
EXP 25-FEB-18

Second Source standards are prepared according to NELAC requirements.

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certified By: Susan Mathews

Susan Mathews

Manufacture Date 27-Nov-2017

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
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(504)469-0333

December 18, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2066833

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 12, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2066833

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2066833

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2066833001	**TB-20171207**	Water	12/07/17 00:00	12/12/17 09:50
2066833002	**EB-20171207**	Water	12/07/17 08:02	12/12/17 09:50
2066833003	**FB-20171207**	Water	12/07/17 09:10	12/12/17 09:50
2066833004	**MW-1D-1BR**	Water	12/07/17 10:33	12/12/17 09:50
2066833005	**MW-1D-4**	Water	12/07/17 11:35	12/12/17 09:50
2066833006	**MW-1D-2**	Water	12/07/17 12:15	12/12/17 09:50
2066833007	**EB-20171208**	Water	12/08/17 08:02	12/12/17 09:50
2066833008	**FB-20171208**	Water	12/08/17 08:55	12/12/17 09:50
2066833009	**MW-1A-3**	Water	12/08/17 10:00	12/12/17 09:50
2066833010	**MW-1A-1BR**	Water	12/08/17 11:18	12/12/17 09:50
2066833011	**MW-1A-4**	Water	12/08/17 11:59	12/12/17 09:50

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2066833

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2066833001	**TB-20171207**	EPA 5030B/8260	GEM	56	PASI-N
2066833002	**EB-20171207**	EPA 5030B/8260	GEM	56	PASI-N
2066833003	**FB-20171207**	EPA 5030B/8260	GEM	56	PASI-N
2066833004	**MW-1D-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2066833005	**MW-1D-4**	EPA 5030B/8260	GEM	56	PASI-N
2066833006	**MW-1D-2**	EPA 5030B/8260	GEM	56	PASI-N
2066833007	**EB-20171208**	EPA 5030B/8260	GEM	56	PASI-N
2066833008	**FB-20171208**	EPA 5030B/8260	GEM	56	PASI-N
2066833009	**MW-1A-3**	EPA 5030B/8260	GEM	56	PASI-N
2066833010	**MW-1A-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2066833011	**MW-1A-4**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2066833

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 18, 2017

General Information:
11 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: TB-20171207 **Lab ID: 2066833001** Collected: 12/07/17 00:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.5**	ug/L	4.0	1		12/15/17 12:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 12:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 12:07	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 12:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 12:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 12:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 12:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 12:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 12:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 12:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 12:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 12:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 12:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 12:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 12:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 12:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 12:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 12:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 12:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 406	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 421	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 427	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 428	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 508	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 528	ND	ug/L	1.0	1		12/15/17 12:07		
Halomar	ND	ug/L	1.0	1		12/15/17 12:07		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 12:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 12:07		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 12:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 12:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 12:07	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 12:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 12:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 12:07	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 12:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 12:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: TB-20171207 **Lab ID: 2066833001** Collected: 12/07/17 00:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 12:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 12:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 12:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 12:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 12:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 12:07	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 12:07	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/15/17 12:07	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/15/17 12:07	1868-53-7	

Sample: EB-20171207 **Lab ID: 2066833002** Collected: 12/07/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/15/17 12:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 12:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 12:25	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 12:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 12:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 12:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 12:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 12:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 12:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 12:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 12:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 12:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 12:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 12:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 12:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 12:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 12:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 12:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 12:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 406	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 421	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 427	ND	ug/L	1.0	1		12/15/17 12:25		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: EB-20171207 **Lab ID: 2066833002** Collected: 12/07/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 508	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 528	ND	ug/L	1.0	1		12/15/17 12:25		
Halomar	ND	ug/L	1.0	1		12/15/17 12:25		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 12:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 12:25		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 12:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 12:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 12:25	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 12:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 12:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 12:25	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 12:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 12:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 12:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 12:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 12:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 12:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 12:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 12:25	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 12:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/15/17 12:25	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/15/17 12:25	1868-53-7	

Sample: FB-20171207 **Lab ID: 2066833003** Collected: 12/07/17 09:10 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.2**	ug/L	4.0	1		12/15/17 12:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 12:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 12:43	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 12:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 12:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 12:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 12:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 12:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 12:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 12:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 12:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 12:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 12:43	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: FB-20171207 **Lab ID: 2066833003** Collected: 12/07/17 09:10 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/15/17 12:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 12:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 12:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 12:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 12:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 12:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 406	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 421	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 427	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 428	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 508	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 528	ND	ug/L	1.0	1		12/15/17 12:43		
Halomar	ND	ug/L	1.0	1		12/15/17 12:43		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 12:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 12:43		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 12:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 12:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 12:43	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 12:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 12:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 12:43	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 12:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 12:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 12:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 12:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 12:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 12:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 12:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 12:43	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/15/17 12:43	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/15/17 12:43	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/15/17 12:43	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-1BR **Lab ID: 2066833004** Collected: 12/07/17 10:33 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.2**	ug/L	4.0	1		12/15/17 11:50	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 11:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 11:50	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 11:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 11:50	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 11:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 11:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 11:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 11:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 11:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 11:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 11:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 11:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 11:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 11:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 11:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 11:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 11:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 11:50	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 11:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 11:50	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 406	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 421	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 427	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 428	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 508	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 528	ND	ug/L	1.0	1		12/15/17 11:50		
Halomar	ND	ug/L	1.0	1		12/15/17 11:50		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 11:50	591-78-6	
Isoflurane	**10.3**	ug/L	1.0	1		12/15/17 11:50		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 11:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 11:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 11:50	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 11:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 11:50	79-34-5	
Tetrachloroethene	**4.2**	ug/L	1.0	1		12/15/17 11:50	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 11:50	108-88-3	
Total Haloether	**10.3**	ug/L	1.0	1		12/15/17 11:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-1BR **Lab ID: 2066833004** Collected: 12/07/17 10:33 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 11:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 11:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 11:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 11:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 11:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 11:50	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/15/17 11:50	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/15/17 11:50	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		12/15/17 11:50	1868-53-7	

Sample: MW-1D-4 **Lab ID: 2066833005** Collected: 12/07/17 11:35 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.2**	ug/L	4.0	1		12/15/17 13:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 13:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:00	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 13:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:00		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-4 **Lab ID: 2066833005** Collected: 12/07/17 11:35 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 508	**4.1**	ug/L	1.0	1		12/15/17 13:00		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:00		
Halomar	ND	ug/L	1.0	1		12/15/17 13:00		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:00	591-78-6	
Isoflurane	**3.6**	ug/L	1.0	1		12/15/17 13:00		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:00	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 13:00	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:00	108-88-3	
Total Haloether	**7.7**	ug/L	1.0	1		12/15/17 13:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:00	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 13:00	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/15/17 13:00	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		12/15/17 13:00	1868-53-7	

Sample: MW-1D-2 **Lab ID: 2066833006** Collected: 12/07/17 12:15 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.9**	ug/L	4.0	1		12/15/17 13:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 13:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:18	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:18	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-2 **Lab ID: 2066833006** Collected: 12/07/17 12:15 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:18	10061-02-6	
Enflurane	**2.6**	ug/L	1.0	1		12/15/17 13:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:18	100-41-4	
Haloether 229	**1.3**	ug/L	1.0	1		12/15/17 13:18		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 508	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:18		
Halomar	**7.1**	ug/L	1.0	1		12/15/17 13:18		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:18	591-78-6	
Isoflurane	**9.1**	ug/L	1.0	1		12/15/17 13:18		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:18	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:18	79-34-5	
Tetrachloroethene	**4.3**	ug/L	1.0	1		12/15/17 13:18	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:18	108-88-3	
Total Haloether	**20.1**	ug/L	1.0	1		12/15/17 13:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:18	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 13:18	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/15/17 13:18	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		12/15/17 13:18	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: EB-20171208 **Lab ID: 2066833007** Collected: 12/08/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/15/17 13:36	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 13:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:36	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 13:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 508	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:36		
Halomar	ND	ug/L	1.0	1		12/15/17 13:36		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:36	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 13:36		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:36	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 13:36	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:36	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 13:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: EB-20171208 **Lab ID: 2066833007** Collected: 12/08/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:36	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:36	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 13:36	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/15/17 13:36	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		12/15/17 13:36	1868-53-7	

Sample: FB-20171208 **Lab ID: 2066833008** Collected: 12/08/17 08:55 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/15/17 13:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 13:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:54	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 13:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:54		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: FB-20171208 **Lab ID: 2066833008** Collected: 12/08/17 08:55 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 508	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:54		
Halomar	ND	ug/L	1.0	1		12/15/17 13:54		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:54	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 13:54		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:54	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 13:54	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:54	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 13:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:54	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 13:54	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/15/17 13:54	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/15/17 13:54	1868-53-7	

Sample: MW-1A-3 **Lab ID: 2066833009** Collected: 12/08/17 10:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.8**	ug/L	4.0	1		12/15/17 14:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 14:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 14:12	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 14:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 14:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 14:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 14:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 14:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 14:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 14:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 14:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 14:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 14:12	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-3 **Lab ID: 2066833009** Collected: 12/08/17 10:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/15/17 14:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 14:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 14:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 14:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 14:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 14:12	100-41-4	
Haloether 229	**5.1**	ug/L	1.0	1		12/15/17 14:12		
Haloether 406	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 421	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 427	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 428	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 508	**30.6**	ug/L	1.0	1		12/15/17 14:12		
Haloether 528	ND	ug/L	1.0	1		12/15/17 14:12		
Halomar	ND	ug/L	1.0	1		12/15/17 14:12		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 14:12	591-78-6	
Isoflurane	**23.3**	ug/L	1.0	1		12/15/17 14:12		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 14:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 14:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 14:12	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 14:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 14:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 14:12	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 14:12	108-88-3	
Total Haloether	**59.0**	ug/L	1.0	1		12/15/17 14:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 14:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 14:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 14:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 14:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 14:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 14:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 14:12	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		12/15/17 14:12	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		12/15/17 14:12	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-1BR **Lab ID: 2066833010** Collected: 12/08/17 11:18 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.6**	ug/L	4.0	1		12/15/17 14:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 14:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 14:29	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 14:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 14:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 14:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 14:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 14:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 14:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 14:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 14:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 14:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 14:29	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 14:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 14:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 14:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 14:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:29	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 14:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 14:29	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 406	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 421	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 427	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 428	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 508	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 528	ND	ug/L	1.0	1		12/15/17 14:29		
Halomar	ND	ug/L	1.0	1		12/15/17 14:29		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 14:29	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 14:29		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 14:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 14:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 14:29	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 14:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 14:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 14:29	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 14:29	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 14:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-1BR **Lab ID: 2066833010** Collected: 12/08/17 11:18 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 14:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 14:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 14:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 14:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 14:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 14:29	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 14:29	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/15/17 14:29	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		12/15/17 14:29	1868-53-7	

Sample: MW-1A-4 **Lab ID: 2066833011** Collected: 12/08/17 11:59 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.0**	ug/L	4.0	1		12/15/17 14:47	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 14:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 14:47	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 14:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 14:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 14:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 14:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 14:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 14:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 14:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 14:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 14:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 14:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 14:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 14:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 14:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 14:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:47	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 14:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 14:47	100-41-4	
Haloether 229	**8.0**	ug/L	1.0	1		12/15/17 14:47		
Haloether 406	ND	ug/L	1.0	1		12/15/17 14:47		
Haloether 421	ND	ug/L	1.0	1		12/15/17 14:47		
Haloether 427	ND	ug/L	1.0	1		12/15/17 14:47		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-4 **Lab ID: 2066833011** Collected: 12/08/17 11:59 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 14:47		
Haloether 508	**36.7**	ug/L	1.0	1		12/15/17 14:47		
Haloether 528	**1.1**	ug/L	1.0	1		12/15/17 14:47		
Halomar	ND	ug/L	1.0	1		12/15/17 14:47		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 14:47	591-78-6	
Isoflurane	**38.7**	ug/L	1.0	1		12/15/17 14:47		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 14:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 14:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 14:47	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 14:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 14:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 14:47	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 14:47	108-88-3	
Total Haloether	**84.5**	ug/L	1.0	1		12/15/17 14:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 14:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 14:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 14:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 14:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 14:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 14:47	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/15/17 14:47	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/15/17 14:47	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/15/17 14:47	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066833

QC Batch: 96881 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2066833001, 2066833002, 2066833003, 2066833004, 2066833005, 2066833006, 2066833007, 2066833008, 2066833009, 2066833010, 2066833011

METHOD BLANK: 416997 | Matrix: Water
Associated Lab Samples: 2066833001, 2066833002, 2066833003, 2066833004, 2066833005, 2066833006, 2066833007, 2066833008, 2066833009, 2066833010, 2066833011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/15/17 10:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/15/17 10:22	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/15/17 10:22	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/15/17 10:22	
1,1-Dichloroethane	ug/L	ND	1.0	12/15/17 10:22	
1,1-Dichloroethene	ug/L	ND	1.0	12/15/17 10:22	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/15/17 10:22	
1,2-Dichloroethane	ug/L	ND	1.0	12/15/17 10:22	
1,2-Dichloropropane	ug/L	ND	1.0	12/15/17 10:22	
2-Butanone (MEK)	ug/L	ND	2.0	12/15/17 10:22	
2-Hexanone	ug/L	ND	2.0	12/15/17 10:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/15/17 10:22	
Acetone	ug/L	ND	4.0	12/15/17 10:22	
Acrolein	ug/L	ND	8.0	12/15/17 10:22	
Acrylonitrile	ug/L	ND	4.0	12/15/17 10:22	
Benzene	ug/L	ND	1.0	12/15/17 10:22	
Bromodichloromethane	ug/L	ND	1.0	12/15/17 10:22	
Bromoform	ug/L	ND	1.0	12/15/17 10:22	
Bromomethane	ug/L	ND	1.0	12/15/17 10:22	
Carbon disulfide	ug/L	ND	1.0	12/15/17 10:22	
Carbon tetrachloride	ug/L	ND	1.0	12/15/17 10:22	
Chlorobenzene	ug/L	ND	1.0	12/15/17 10:22	
Chloroethane	ug/L	ND	1.0	12/15/17 10:22	
Chloroform	ug/L	ND	1.0	12/15/17 10:22	
Chloromethane	ug/L	ND	1.0	12/15/17 10:22	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/15/17 10:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/15/17 10:22	
Dibromochloromethane	ug/L	ND	1.0	12/15/17 10:22	
Dibromomethane	ug/L	ND	1.0	12/15/17 10:22	
Enflurane	ug/L	ND	1.0	12/15/17 10:22	
Ethylbenzene	ug/L	ND	1.0	12/15/17 10:22	
Haloether 229	ug/L	ND	1.0	12/15/17 10:22	
Haloether 406	ug/L	ND	1.0	12/15/17 10:22	
Haloether 421	ug/L	ND	1.0	12/15/17 10:22	
Haloether 427	ug/L	ND	1.0	12/15/17 10:22	
Haloether 428	ug/L	ND	1.0	12/15/17 10:22	
Haloether 508	ug/L	ND	1.0	12/15/17 10:22	
Haloether 528	ug/L	ND	1.0	12/15/17 10:22	
Halomar	ug/L	ND	1.0	12/15/17 10:22	
Isoflurane	ug/L	ND	1.0	12/15/17 10:22	

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St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066833

METHOD BLANK: 416997 Matrix: Water

Associated Lab Samples: 2066833001, 2066833002, 2066833003, 2066833004, 2066833005, 2066833006, 2066833007, 2066833008, 2066833009, 2066833010, 2066833011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	12/15/17 10:22	
Methoxyflurane	ug/L	ND	1.0	12/15/17 10:22	
Methylene Chloride	ug/L	ND	5.0	12/15/17 10:22	
o-Xylene	ug/L	ND	1.0	12/15/17 10:22	
Styrene	ug/L	ND	1.0	12/15/17 10:22	
Tetrachloroethene	ug/L	ND	1.0	12/15/17 10:22	
Toluene	ug/L	ND	1.0	12/15/17 10:22	
Total Haloether	ug/L	ND	1.0	12/15/17 10:22	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/15/17 10:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/15/17 10:22	
Trichloroethene	ug/L	ND	1.0	12/15/17 10:22	
Trichlorofluoromethane	ug/L	ND	1.0	12/15/17 10:22	
Vinyl chloride	ug/L	ND	1.0	12/15/17 10:22	
4-Bromofluorobenzene (S)	%.	99	68-124	12/15/17 10:22	
Dibromofluoromethane (S)	%.	101	72-126	12/15/17 10:22	
Toluene-d8 (S)	%.	99	79-119	12/15/17 10:22	

LABORATORY CONTROL SAMPLE: 416998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.0	102	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	53.5	107	15-179	
1,1,2-Trichloroethane	ug/L	50	47.7	95	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	46.7	93	38-121	
1,1-Dichloroethane	ug/L	50	52.4	105	63-129	
1,1-Dichloroethene	ug/L	50	46.2	92	51-139	
1,2,3-Trichloropropane	ug/L	50	55.5	111	13-187	
1,2-Dichloroethane	ug/L	50	46.4	93	57-148	
1,2-Dichloropropane	ug/L	50	49.0	98	66-128	
2-Butanone (MEK)	ug/L	50	53.4	107	32-183	
2-Hexanone	ug/L	50	52.1	104	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	51.6	103	26-171	
Acetone	ug/L	50	64.0	128	22-165	
Acrolein	ug/L	50	45.1	90	10-131	
Acrylonitrile	ug/L	50	47.8	96	18-149	
Benzene	ug/L	50	47.6	95	62-131	
Bromodichloromethane	ug/L	50	49.0	98	69-132	
Bromoform	ug/L	50	45.0	90	35-166	
Bromomethane	ug/L	50	50.6	101	34-158	
Carbon disulfide	ug/L	50	45.0	90	31-128	
Carbon tetrachloride	ug/L	50	50.7	101	54-144	
Chlorobenzene	ug/L	50	54.7	109	70-127	
Chloroethane	ug/L	50	47.1	94	17-195	

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REPORT OF LABORATORY ANALYSIS

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(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066833

LABORATORY CONTROL SAMPLE: 416998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	50	52.5	105	73-134	
Chloromethane	ug/L	50	53.3	107	17-153	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	68-129	
cis-1,3-Dichloropropene	ug/L	50	51.9	104	72-138	
Dibromochloromethane	ug/L	50	46.6	93	49-146	
Dibromomethane	ug/L	50	47.6	95	56-145	
Enflurane	ug/L	50	52.5	105	56-135	
Ethylbenzene	ug/L	50	52.4	105	66-126	
Haloether 229	ug/L	50	37.8	76	62-123	
Haloether 406	ug/L	50	50.5	101	62-134	
Haloether 421	ug/L	50	47.7	95	70-128	
Haloether 427	ug/L	50	48.7	97	69-153	
Haloether 428	ug/L	50	46.4	93	70-134	
Haloether 508	ug/L	50	47.4	95	52-139	
Haloether 528	ug/L	50	44.7	89	48-157	
Halomar	ug/L	50	51.7	103	62-128	
Isoflurane	ug/L	50	49.2	98	61-132	
m&p-Xylene	ug/L	100	103	103	65-129	
Methoxyflurane	ug/L	50	47.1	94	72-124	
Methylene Chloride	ug/L	50	48.8	98	46-168	
o-Xylene	ug/L	50	51.9	104	65-124	
Styrene	ug/L	50	54.7	109	72-133	
Tetrachloroethene	ug/L	50	54.2	108	46-157	
Toluene	ug/L	50	50.4	101	69-126	
Total Haloether	ug/L		524			
trans-1,2-Dichloroethene	ug/L	50	52.2	104	60-129	
trans-1,3-Dichloropropene	ug/L	50	50.1	100	59-149	
Trichloroethene	ug/L	50	47.4	95	67-132	
Trichlorofluoromethane	ug/L	50	46.5	93	39-171	
Vinyl chloride	ug/L	50	41.2	82	27-149	
4-Bromofluorobenzene (S)	%.			99	68-124	
Dibromofluoromethane (S)	%.			100	72-126	
Toluene-d8 (S)	%.			99	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 416999 417000

Parameter	Units	2066833004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	57.7	52.9	115	106	54-137	9	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	58.6	52.0	117	104	15-187	12	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	51.6	49.1	103	98	59-148	5	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	54.0	48.6	108	97	40-117	10	20	
1,1-Dichloroethane	ug/L	ND	50	50	58.4	51.7	117	103	59-133	12	20	
1,1-Dichloroethene	ug/L	ND	50	50	53.1	47.2	106	94	44-146	12	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	59.0	54.0	118	108	14-199	9	20	

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REPORT OF LABORATORY ANALYSIS

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(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066833

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 416999 417000

Parameter	Units	2066833004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	50.6	46.1	101	92	56-154	9	20	
1,2-Dichloropropane	ug/L	ND	50	50	54.4	48.7	109	97	62-135	11	20	
2-Butanone (MEK)	ug/L	ND	50	50	49.4	45.4	99	91	20-205	8	20	
2-Hexanone	ug/L	ND	50	50	55.7	51.8	111	104	25-189	7	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	58.2	52.8	116	106	23-184	10	20	
Acetone	ug/L	4.2	50	50	55.8	50.5	103	92	11-217	10	20	
Acrolein	ug/L	ND	50	50	45.0	42.6	90	85	10-142	5	20	
Acrylonitrile	ug/L	ND	50	50	51.2	48.9	102	98	20-164	4	20	
Benzene	ug/L	ND	50	50	55.2	50.3	110	100	52-141	9	20	
Bromodichloromethane	ug/L	ND	50	50	53.6	48.9	107	98	70-134	9	20	
Bromoform	ug/L	ND	50	50	50.7	44.7	101	89	37-171	13	20	
Bromomethane	ug/L	ND	50	50	52.0	49.3	104	99	34-155	5	20	
Carbon disulfide	ug/L	ND	50	50	56.2	48.5	112	96	28-130	15	20	
Carbon tetrachloride	ug/L	ND	50	50	57.3	52.8	115	106	48-146	8	20	
Chlorobenzene	ug/L	ND	50	50	59.9	56.3	120	113	67-129	6	20	
Chloroethane	ug/L	ND	50	50	52.3	46.3	105	93	12-192	12	20	
Chloroform	ug/L	ND	50	50	57.4	52.3	115	105	66-143	9	20	
Chloromethane	ug/L	ND	50	50	59.4	54.8	119	110	14-155	8	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	55.6	49.6	109	97	56-141	11	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	55.6	49.4	111	99	70-139	12	20	
Dibromochloromethane	ug/L	ND	50	50	50.2	47.0	100	94	50-150	6	20	
Dibromomethane	ug/L	ND	50	50	52.2	47.8	104	96	58-153	9	20	
Enflurane	ug/L	ND	50	50	60.0	57.3	120	115	63-126	4	20	
Ethylbenzene	ug/L	ND	50	50	58.4	54.5	117	109	57-135	7	20	
Haloether 229	ug/L	ND	50	50	47.5	43.8	95	88	56-127	8	20	
Haloether 406	ug/L	ND	50	50	60.1	57.2	120	114	68-128	5	20	
Haloether 421	ug/L	ND	50	50	55.9	51.7	112	103	74-120	8	20	
Haloether 427	ug/L	ND	50	50	58.8	55.6	118	111	78-120	6	20	
Haloether 428	ug/L	ND	50	50	56.6	54.7	113	109	74-125	3	20	
Haloether 508	ug/L	ND	50	50	56.6	56.9	113	114	28-156	1	20	
Haloether 528	ug/L	ND	50	50	51.6	49.5	103	99	45-142	4	20	
Halomar	ug/L	ND	50	50	57.9	54.1	116	108	67-123	7	20	
Isoflurane	ug/L	10.3	50	50	68.7	63.2	117	106	45-140	8	20	
m&p-Xylene	ug/L	ND	100	100	116	108	116	108	56-136	7	20	
Methoxyflurane	ug/L	ND	50	50	52.1	48.0	104	96	75-119	8	20	
Methylene Chloride	ug/L	ND	50	50	51.5	48.4	103	97	45-166	6	20	
o-Xylene	ug/L	ND	50	50	58.6	55.3	117	111	57-133	6	20	
Styrene	ug/L	ND	50	50	59.2	55.2	118	110	58-144	7	20	
Tetrachloroethene	ug/L	4.2	50	50	65.2	63.0	122	118	48-143	4	20	
Toluene	ug/L	ND	50	50	56.2	51.5	112	103	59-136	9	20	
Total Haloether	ug/L	10.3			626	592				6		
trans-1,2-Dichloroethene	ug/L	ND	50	50	57.5	53.9	115	108	57-132	6	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	53.0	47.8	106	96	59-154	10	20	
Trichloroethene	ug/L	ND	50	50	57.2	52.1	113	103	58-140	9	20	
Trichlorofluoromethane	ug/L	ND	50	50	55.5	50.3	111	101	24-175	10	20	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2066833

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 416999 417000

Parameter	Units	2066833004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	ND	50	50	49.9	46.3	100	93	21-150	7	20	
4-Bromofluorobenzene (S)	%.						98	96	68-124			
Dibromofluoromethane (S)	%.						99	100	72-126			
Toluene-d8 (S)	%.						97	99	79-119			

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2066833

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2066833

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2066833001	**TB-20171207**	EPA 5030B/8260	96881		
2066833002	**EB-20171207**	EPA 5030B/8260	96881		
2066833003	**FB-20171207**	EPA 5030B/8260	96881		
2066833004	**MW-1D-1BR**	EPA 5030B/8260	96881		
2066833005	**MW-1D-4**	EPA 5030B/8260	96881		
2066833006	**MW-1D-2**	EPA 5030B/8260	96881		
2066833007	**EB-20171208**	EPA 5030B/8260	96881		
2066833008	**FB-20171208**	EPA 5030B/8260	96881		
2066833009	**MW-1A-3**	EPA 5030B/8260	96881		
2066833010	**MW-1A-1BR**	EPA 5030B/8260	96881		
2066833011	**MW-1A-4**	EPA 5030B/8260	96881		

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CHAIN-OF-CUSTODY / Analytical Requ

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fi

WO# : 2066833

2066833

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171207	WT	G			12/07/17	LAB		2				2						X			
2	EB-20171207	WT	G			12/07/17	0802		3				3					X				
3	FB-20171207	WT	G			12/07/17	0910		3				3					X				
4	MW-1D-1BR	WT	G			12/07/17	1033		3				3					X				
5	MW-1D-4	WT	G			12/07/17	1135		3				3					X				
6	MW-1D-2	WT	G			12/07/17	1215		3				3					X				
7	EB-20171208	WT	G			12/08/17	0802		3				3					X				
8	FB-20171208	WT	G			12/08/17	0855		3				3					X				
9	MW-1A-3	WT	G			12/08/17	1000		3				3					X				
10	MW-1A-1BR	WT	G			12/08/17	1118		3				3					X				
11	MW-1A-4	WT	G			12/08/17	1159		3				3					X				
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrew Lidom Arcadis	12/8/17	1448	[illegible]	12/8/17	1448	4°C	Y	N	Y
	Fed Ex 12/12/17		0950	Fed Ex [illegible] 12/12/17		0950	0.1	Y	Y	Y

TEMP in C	
Received on Ice (Y/N)	
Custody Sealed Cooler (Y/N)	
Samples Intact (Y/N)	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew Lidom

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/8/17

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon Pr

WO#: 2066833

PM: CJM Due Date: 12/27/17
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12/12/17 JMB

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐Yes	☐No	☑N/A	1	
Chain of Custody Present:	☑Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6	
Sufficient Volume:	☑Yes	☐No	☐N/A	7	
Correct Containers Used:	☑Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9	
Sample Labels match COC:	☑Yes	☐No	☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14	
Trip Blank Present:	☑Yes	☐No		15	1 voa vial >6mm

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, LLC
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(504)469-0333

December 27, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2067491

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 19, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2067491

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2067491

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2067491001	**TB-20171211**	Water	12/11/17 00:00	12/19/17 09:15
2067491002	**EB-20171211**	Water	12/11/17 08:00	12/19/17 09:15
2067491003	**FB-20171211**	Water	12/11/17 10:12	12/19/17 09:15
2067491004	**MW-1A-2**	Water	12/11/17 11:19	12/19/17 09:15
2067491005	**MW-6-90**	Water	12/11/17 12:40	12/19/17 09:15
2067491006	**EB-20171212**	Water	12/12/17 07:40	12/19/17 09:15
2067491007	**FB-20171212**	Water	12/12/17 09:34	12/19/17 09:15
2067491008	**MW-11-20**	Water	12/12/17 10:59	12/19/17 09:15
2067491009	**MW-19-90**	Water	12/12/17 12:58	12/19/17 09:15
2067491010	**EB-20171213**	Water	12/13/17 07:49	12/19/17 09:15
2067491011	**FB-20171213**	Water	12/13/17 09:34	12/19/17 09:15
2067491012	**MW-15-90**	Water	12/13/17 11:08	12/19/17 09:15
2067491013	**MW-17-90**	Water	12/13/17 13:24	12/19/17 09:15

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2067491

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2067491001	**TB-20171211**	EPA 5030B/8260	GEM	56	PASI-N
2067491002	**EB-20171211**	EPA 5030B/8260	GEM	56	PASI-N
2067491003	**FB-20171211**	EPA 5030B/8260	GEM	56	PASI-N
2067491004	**MW-1A-2**	EPA 5030B/8260	GEM	56	PASI-N
2067491005	**MW-6-90**	EPA 5030B/8260	GEM	56	PASI-N
2067491006	**EB-20171212**	EPA 5030B/8260	GEM	56	PASI-N
2067491007	**FB-20171212**	EPA 5030B/8260	GEM	56	PASI-N
2067491008	**MW-11-20**	EPA 5030B/8260	GEM	56	PASI-N
2067491009	**MW-19-90**	EPA 5030B/8260	GEM	56	PASI-N
2067491010	**EB-20171213**	EPA 5030B/8260	GEM	56	PASI-N
2067491011	**FB-20171213**	EPA 5030B/8260	GEM	56	PASI-N
2067491012	**MW-15-90**	EPA 5030B/8260	GEM	56	PASI-N
2067491013	**MW-17-90**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2067491

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 27, 2017

General Information:
13 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: TB-20171211 **Lab ID: 2067491001** Collected: 12/11/17 00:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 17:32	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 17:32	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 17:32	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 17:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 17:32	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		12/21/17 17:32	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 17:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 17:32	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 17:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 17:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 17:32	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 17:32	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 17:32	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 17:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 17:32	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 17:32	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 17:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:32	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 17:32	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 17:32	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 406	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 421	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 427	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 428	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 508	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 528	ND	ug/L	1.0	1		12/21/17 17:32		
Halomar	ND	ug/L	1.0	1		12/21/17 17:32		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 17:32	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 17:32		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 17:32	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 17:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 17:32	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 17:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 17:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 17:32	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 17:32	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 17:32		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: TB-20171211 **Lab ID: 2067491001** Collected: 12/11/17 00:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 17:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 17:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 17:32	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 17:32	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 17:32	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 17:32	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/21/17 17:32	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/21/17 17:32	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/21/17 17:32	1868-53-7	

Sample: EB-20171211 **Lab ID: 2067491002** Collected: 12/11/17 08:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 17:50	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 17:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 17:50	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 17:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 17:50	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		12/21/17 17:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 17:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 17:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 17:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 17:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 17:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 17:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 17:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 17:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 17:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 17:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 17:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:50	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 17:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 17:50	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 406	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 421	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 427	ND	ug/L	1.0	1		12/21/17 17:50		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171211 **Lab ID: 2067491002** Collected: 12/11/17 08:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 508	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 528	ND	ug/L	1.0	1		12/21/17 17:50		
Halomar	ND	ug/L	1.0	1		12/21/17 17:50		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 17:50	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 17:50		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 17:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 17:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 17:50	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 17:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 17:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 17:50	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 17:50	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 17:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 17:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 17:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 17:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 17:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 17:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 17:50	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/21/17 17:50	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/21/17 17:50	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/21/17 17:50	1868-53-7	

Sample: FB-20171211 **Lab ID: 2067491003** Collected: 12/11/17 10:12 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 18:08	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 18:08	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 18:08	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 18:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 18:08	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		12/21/17 18:08	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 18:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 18:08	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 18:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 18:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 18:08	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 18:08	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 18:08	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171211 **Lab ID: 2067491003** Collected: 12/11/17 10:12 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/21/17 18:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 18:08	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 18:08	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 18:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:08	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 18:08	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 18:08	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 406	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 421	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 427	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 428	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 508	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 528	ND	ug/L	1.0	1		12/21/17 18:08		
Halomar	ND	ug/L	1.0	1		12/21/17 18:08		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 18:08	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 18:08		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 18:08	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 18:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 18:08	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 18:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 18:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 18:08	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 18:08	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 18:08		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 18:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 18:08	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 18:08	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 18:08	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 18:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 18:08	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/21/17 18:08	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/21/17 18:08	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/21/17 18:08	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-1A-2 **Lab ID: 2067491004** Collected: 12/11/17 11:19 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 17:14	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 17:14	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 17:14	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 17:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 17:14	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		12/21/17 17:14	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 17:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 17:14	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 17:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 17:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 17:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 17:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 17:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 17:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 17:14	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 17:14	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 17:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:14	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 17:14	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 17:14	100-41-4	
Haloether 229	**1.4**	ug/L	1.0	1		12/21/17 17:14		
Haloether 406	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 421	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 427	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 428	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 508	**3.6**	ug/L	1.0	1		12/21/17 17:14		
Haloether 528	ND	ug/L	1.0	1		12/21/17 17:14		
Halomar	ND	ug/L	1.0	1		12/21/17 17:14		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 17:14	591-78-6	
Isoflurane	**8.1**	ug/L	1.0	1		12/21/17 17:14		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 17:14	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 17:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 17:14	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 17:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 17:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 17:14	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 17:14	108-88-3	
Total Haloether	**13.1**	ug/L	1.0	1		12/21/17 17:14		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-1A-2 **Lab ID: 2067491004** Collected: 12/11/17 11:19 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 17:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 17:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 17:14	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 17:14	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 17:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 17:14	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/21/17 17:14	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/21/17 17:14	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/21/17 17:14	1868-53-7	

Sample: MW-6-90 **Lab ID: 2067491005** Collected: 12/11/17 12:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 18:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 18:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 18:25	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 18:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 18:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/21/17 18:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 18:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 18:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 18:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 18:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 18:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 18:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 18:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 18:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 18:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 18:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 18:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 18:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 18:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 406	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 421	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 427	ND	ug/L	1.0	1		12/21/17 18:25		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-6-90 **Lab ID: 2067491005** Collected: 12/11/17 12:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 508	**5.1**	ug/L	1.0	1		12/21/17 18:25		
Haloether 528	ND	ug/L	1.0	1		12/21/17 18:25		
Halomar	ND	ug/L	1.0	1		12/21/17 18:25		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 18:25	591-78-6	
Isoflurane	**2.7**	ug/L	1.0	1		12/21/17 18:25		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 18:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 18:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 18:25	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 18:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 18:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 18:25	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 18:25	108-88-3	
Total Haloether	**7.8**	ug/L	1.0	1		12/21/17 18:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 18:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 18:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 18:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 18:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 18:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 18:25	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%.	79-119	1		12/21/17 18:25	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/21/17 18:25	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/21/17 18:25	1868-53-7	

Sample: EB-20171212 **Lab ID: 2067491006** Collected: 12/12/17 07:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 18:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 18:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 18:43	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 18:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 18:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/21/17 18:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 18:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 18:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 18:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 18:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 18:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 18:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 18:43	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171212 **Lab ID: 2067491006** Collected: 12/12/17 07:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/21/17 18:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 18:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 18:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 18:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 18:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 18:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 406	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 421	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 427	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 428	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 508	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 528	ND	ug/L	1.0	1		12/21/17 18:43		
Halomar	ND	ug/L	1.0	1		12/21/17 18:43		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 18:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 18:43		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 18:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 18:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 18:43	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 18:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 18:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 18:43	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 18:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 18:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 18:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 18:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 18:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 18:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 18:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 18:43	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/21/17 18:43	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/21/17 18:43	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/21/17 18:43	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171212 **Lab ID: 2067491007** Collected: 12/12/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**13.0**	ug/L	4.0	1		12/21/17 19:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 19:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 19:01	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 19:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 19:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/21/17 19:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 19:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 19:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 19:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 19:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 19:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 19:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 19:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 19:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 19:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 19:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 19:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 19:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 19:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 19:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 19:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 406	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 421	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 427	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 428	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 508	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 528	ND	ug/L	1.0	1		12/21/17 19:01		
Halomar	ND	ug/L	1.0	1		12/21/17 19:01		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 19:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 19:01		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 19:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 19:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 19:01	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 19:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 19:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 19:01	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 19:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 19:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171212 **Lab ID: 2067491007** Collected: 12/12/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 19:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 19:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 19:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 19:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 19:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 19:01	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/21/17 19:01	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/21/17 19:01	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/21/17 19:01	1868-53-7	

Sample: MW-11-20 **Lab ID: 2067491008** Collected: 12/12/17 10:59 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/22/17 11:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 11:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:05	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:05	10061-02-6	
Enflurane	**5.0**	ug/L	1.0	1		12/22/17 11:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:05		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-11-20 **Lab ID: 2067491008** Collected: 12/12/17 10:59 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:05		
Halomar	**2.7**	ug/L	1.0	1		12/22/17 11:05		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:05		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:05	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:05	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:05	108-88-3	
Total Haloether	**7.7**	ug/L	1.0	1		12/22/17 11:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:05	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/22/17 11:05	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/22/17 11:05	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/22/17 11:05	1868-53-7	

Sample: MW-19-90 **Lab ID: 2067491009** Collected: 12/12/17 12:58 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		12/22/17 11:22	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 11:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:22	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:22	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-19-90 **Lab ID: 2067491009** Collected: 12/12/17 12:58 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 11:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:22	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:22		
Halomar	ND	ug/L	1.0	1		12/22/17 11:22		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:22	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:22		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:22	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:22	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:22	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 11:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:22	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 11:22	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/22/17 11:22	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/22/17 11:22	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171213 **Lab ID: 2067491010** Collected: 12/13/17 07:49 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**10.2**	ug/L	4.0	1		12/22/17 11:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 11:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 11:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:40		
Halomar	ND	ug/L	1.0	1		12/22/17 11:40		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:40	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:40		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:40	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 11:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171213 **Lab ID: 2067491010** Collected: 12/13/17 07:49 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:40	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/22/17 11:40	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/22/17 11:40	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/22/17 11:40	1868-53-7	

Sample: FB-20171213 **Lab ID: 2067491011** Collected: 12/13/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**16.1**	ug/L	4.0	1		12/22/17 11:58	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 11:58	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:58	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:58	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:58	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:58	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:58	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:58	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:58	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 11:58	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:58	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:58		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171213 **Lab ID: 2067491011** Collected: 12/13/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:58		
Halomar	ND	ug/L	1.0	1		12/22/17 11:58		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:58	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:58		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:58	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:58	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:58	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:58	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 11:58		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:58	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:58	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:58	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 11:58	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/22/17 11:58	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/22/17 11:58	1868-53-7	

Sample: MW-15-90 **Lab ID: 2067491012** Collected: 12/13/17 11:08 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.2**	ug/L	4.0	1		12/22/17 12:16	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 12:16	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 12:16	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 12:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 12:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 12:16	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 12:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 12:16	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 12:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 12:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 12:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 12:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 12:16	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-15-90 **Lab ID: 2067491012** Collected: 12/13/17 11:08 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/22/17 12:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 12:16	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 12:16	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:16	75-35-4	
cis-1,2-Dichloroethene	**1.0**	ug/L	1.0	1		12/22/17 12:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 12:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:16	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 12:16	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 12:16	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 406	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 421	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 427	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 428	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 508	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 528	ND	ug/L	1.0	1		12/22/17 12:16		
Halomar	ND	ug/L	1.0	1		12/22/17 12:16		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 12:16	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 12:16		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 12:16	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 12:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 12:16	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 12:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 12:16	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		12/22/17 12:16	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 12:16	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 12:16		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	79-00-5	
Trichloroethene	**1.4**	ug/L	1.0	1		12/22/17 12:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 12:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 12:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 12:16	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 12:16	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 12:16	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 12:16	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 12:16	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/22/17 12:16	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/22/17 12:16	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-17-90 **Lab ID: 2067491013** Collected: 12/13/17 13:24 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/22/17 12:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 12:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 12:33	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 12:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 12:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 12:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 12:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 12:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 12:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 12:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 12:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 12:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 12:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 12:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 12:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 12:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 12:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 12:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 12:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 406	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 421	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 427	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 428	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 508	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 528	ND	ug/L	1.0	1		12/22/17 12:33		
Halomar	ND	ug/L	1.0	1		12/22/17 12:33		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 12:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 12:33		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 12:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 12:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 12:33	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 12:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 12:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 12:33	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 12:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 12:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-17-90 **Lab ID: 2067491013** Collected: 12/13/17 13:24 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 12:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 12:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 12:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 12:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 12:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 12:33	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 12:33	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/22/17 12:33	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/22/17 12:33	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067491

QC Batch: 97501 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2067491001, 2067491002, 2067491003, 2067491004, 2067491005, 2067491006, 2067491007, 2067491008, 2067491009, 2067491010, 2067491011, 2067491012, 2067491013

METHOD BLANK: 419740 | Matrix: Water
Associated Lab Samples: 2067491001, 2067491002, 2067491003, 2067491004, 2067491005, 2067491006, 2067491007, 2067491008, 2067491009, 2067491010, 2067491011, 2067491012, 2067491013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/21/17 15:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/21/17 15:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/21/17 15:46	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/21/17 15:46	
1,1-Dichloroethane	ug/L	ND	1.0	12/21/17 15:46	
1,1-Dichloroethene	ug/L	ND	1.0	12/21/17 15:46	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/21/17 15:46	
1,2-Dichloroethane	ug/L	ND	1.0	12/21/17 15:46	
1,2-Dichloropropane	ug/L	ND	1.0	12/21/17 15:46	
2-Butanone (MEK)	ug/L	ND	2.0	12/21/17 15:46	
2-Hexanone	ug/L	ND	2.0	12/21/17 15:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/21/17 15:46	
Acetone	ug/L	ND	4.0	12/21/17 15:46	
Acrolein	ug/L	ND	8.0	12/21/17 15:46	
Acrylonitrile	ug/L	ND	4.0	12/21/17 15:46	
Benzene	ug/L	ND	1.0	12/21/17 15:46	
Bromodichloromethane	ug/L	ND	1.0	12/21/17 15:46	
Bromoform	ug/L	ND	1.0	12/21/17 15:46	
Bromomethane	ug/L	ND	1.0	12/21/17 15:46	
Carbon disulfide	ug/L	ND	1.0	12/21/17 15:46	
Carbon tetrachloride	ug/L	ND	1.0	12/21/17 15:46	
Chlorobenzene	ug/L	ND	1.0	12/21/17 15:46	
Chloroethane	ug/L	ND	1.0	12/21/17 15:46	
Chloroform	ug/L	ND	1.0	12/21/17 15:46	
Chloromethane	ug/L	ND	1.0	12/21/17 15:46	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/21/17 15:46	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/21/17 15:46	
Dibromochloromethane	ug/L	ND	1.0	12/21/17 15:46	
Dibromomethane	ug/L	ND	1.0	12/21/17 15:46	
Enflurane	ug/L	ND	1.0	12/21/17 15:46	
Ethylbenzene	ug/L	ND	1.0	12/21/17 15:46	
Haloether 229	ug/L	ND	1.0	12/21/17 15:46	
Haloether 406	ug/L	ND	1.0	12/21/17 15:46	
Haloether 421	ug/L	ND	1.0	12/21/17 15:46	
Haloether 427	ug/L	ND	1.0	12/21/17 15:46	
Haloether 428	ug/L	ND	1.0	12/21/17 15:46	
Haloether 508	ug/L	ND	1.0	12/21/17 15:46	
Haloether 528	ug/L	ND	1.0	12/21/17 15:46	
Halomar	ug/L	ND	1.0	12/21/17 15:46	
Isoflurane	ug/L	ND	1.0	12/21/17 15:46	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067491

METHOD BLANK: 419740 Matrix: Water

Associated Lab Samples: 2067491001, 2067491002, 2067491003, 2067491004, 2067491005, 2067491006, 2067491007, 2067491008, 2067491009, 2067491010, 2067491011, 2067491012, 2067491013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	12/21/17 15:46	
Methoxyflurane	ug/L	ND	1.0	12/21/17 15:46	
Methylene Chloride	ug/L	ND	5.0	12/21/17 15:46	
o-Xylene	ug/L	ND	1.0	12/21/17 15:46	
Styrene	ug/L	ND	1.0	12/21/17 15:46	
Tetrachloroethene	ug/L	ND	1.0	12/21/17 15:46	
Toluene	ug/L	ND	1.0	12/21/17 15:46	
Total Haloether	ug/L	ND	1.0	12/21/17 15:46	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/21/17 15:46	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/21/17 15:46	
Trichloroethene	ug/L	ND	1.0	12/21/17 15:46	
Trichlorofluoromethane	ug/L	ND	1.0	12/21/17 15:46	
Vinyl chloride	ug/L	ND	1.0	12/21/17 15:46	
4-Bromofluorobenzene (S)	%.	104	68-124	12/21/17 15:46	
Dibromofluoromethane (S)	%.	100	72-126	12/21/17 15:46	
Toluene-d8 (S)	%.	106	79-119	12/21/17 15:46	

METHOD BLANK: 420039 Matrix: Water

Associated Lab Samples: 2067491001, 2067491002, 2067491003, 2067491004, 2067491005, 2067491006, 2067491007, 2067491008, 2067491009, 2067491010, 2067491011, 2067491012, 2067491013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/22/17 10:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/22/17 10:11	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/22/17 10:11	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/22/17 10:11	
1,1-Dichloroethane	ug/L	ND	1.0	12/22/17 10:11	
1,1-Dichloroethene	ug/L	ND	1.0	12/22/17 10:11	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/22/17 10:11	
1,2-Dichloroethane	ug/L	ND	1.0	12/22/17 10:11	
1,2-Dichloropropane	ug/L	ND	1.0	12/22/17 10:11	
2-Butanone (MEK)	ug/L	ND	2.0	12/22/17 10:11	
2-Hexanone	ug/L	ND	2.0	12/22/17 10:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/22/17 10:11	
Acetone	ug/L	ND	4.0	12/22/17 10:11	
Acrolein	ug/L	ND	8.0	12/22/17 10:11	
Acrylonitrile	ug/L	ND	4.0	12/22/17 10:11	
Benzene	ug/L	ND	1.0	12/22/17 10:11	
Bromodichloromethane	ug/L	ND	1.0	12/22/17 10:11	
Bromoform	ug/L	ND	1.0	12/22/17 10:11	
Bromomethane	ug/L	ND	1.0	12/22/17 10:11	
Carbon disulfide	ug/L	ND	1.0	12/22/17 10:11	
Carbon tetrachloride	ug/L	ND	1.0	12/22/17 10:11	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067491

METHOD BLANK: 420039 Matrix: Water

Associated Lab Samples: 2067491001, 2067491002, 2067491003, 2067491004, 2067491005, 2067491006, 2067491007, 2067491008, 2067491009, 2067491010, 2067491011, 2067491012, 2067491013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorobenzene	ug/L	ND	1.0	12/22/17 10:11	
Chloroethane	ug/L	ND	1.0	12/22/17 10:11	
Chloroform	ug/L	ND	1.0	12/22/17 10:11	
Chloromethane	ug/L	ND	1.0	12/22/17 10:11	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/22/17 10:11	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/22/17 10:11	
Dibromochloromethane	ug/L	ND	1.0	12/22/17 10:11	
Dibromomethane	ug/L	ND	1.0	12/22/17 10:11	
Enflurane	ug/L	ND	1.0	12/22/17 10:11	
Ethylbenzene	ug/L	ND	1.0	12/22/17 10:11	
Haloether 229	ug/L	ND	1.0	12/22/17 10:11	
Haloether 406	ug/L	ND	1.0	12/22/17 10:11	
Haloether 421	ug/L	ND	1.0	12/22/17 10:11	
Haloether 427	ug/L	ND	1.0	12/22/17 10:11	
Haloether 428	ug/L	ND	1.0	12/22/17 10:11	
Haloether 508	ug/L	ND	1.0	12/22/17 10:11	
Haloether 528	ug/L	ND	1.0	12/22/17 10:11	
Halomar	ug/L	ND	1.0	12/22/17 10:11	
Isoflurane	ug/L	ND	1.0	12/22/17 10:11	
m&p-Xylene	ug/L	ND	2.0	12/22/17 10:11	
Methoxyflurane	ug/L	ND	1.0	12/22/17 10:11	
Methylene Chloride	ug/L	ND	5.0	12/22/17 10:11	
o-Xylene	ug/L	ND	1.0	12/22/17 10:11	
Styrene	ug/L	ND	1.0	12/22/17 10:11	
Tetrachloroethene	ug/L	ND	1.0	12/22/17 10:11	
Toluene	ug/L	ND	1.0	12/22/17 10:11	
Total Haloether	ug/L	ND	1.0	12/22/17 10:11	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/22/17 10:11	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/22/17 10:11	
Trichloroethene	ug/L	ND	1.0	12/22/17 10:11	
Trichlorofluoromethane	ug/L	ND	1.0	12/22/17 10:11	
Vinyl chloride	ug/L	ND	1.0	12/22/17 10:11	
4-Bromofluorobenzene (S)	%.	101	68-124	12/22/17 10:11	
Dibromofluoromethane (S)	%.	98	72-126	12/22/17 10:11	
Toluene-d8 (S)	%.	102	79-119	12/22/17 10:11	

LABORATORY CONTROL SAMPLE: 419741

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.1	104	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	51.8	104	15-179	
1,1,2-Trichloroethane	ug/L	50	55.3	111	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	39.4	79	38-121	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067491

LABORATORY CONTROL SAMPLE: 419741

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	50	50.1	100	63-129	
1,1-Dichloroethene	ug/L	50	39.3	79	51-139	
1,2,3-Trichloropropane	ug/L	50	54.3	109	13-187	
1,2-Dichloroethane	ug/L	50	54.6	109	57-148	
1,2-Dichloropropane	ug/L	50	54.9	110	66-128	
2-Butanone (MEK)	ug/L	50	55.5	111	32-183	
2-Hexanone	ug/L	50	57.5	115	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	61.3	123	26-171	
Acetone	ug/L	50	52.2	104	22-165	
Acrolein	ug/L	50	48.2	96	10-131	
Acrylonitrile	ug/L	50	54.0	108	18-149	
Benzene	ug/L	50	50.6	101	62-131	
Bromodichloromethane	ug/L	50	58.5	117	69-132	
Bromoform	ug/L	50	53.4	107	35-166	
Bromomethane	ug/L	50	53.2	106	34-158	
Carbon disulfide	ug/L	50	34.3	69	31-128	
Carbon tetrachloride	ug/L	50	52.7	105	54-144	
Chlorobenzene	ug/L	50	54.3	109	70-127	
Chloroethane	ug/L	50	52.0	104	17-195	
Chloroform	ug/L	50	50.3	101	73-134	
Chloromethane	ug/L	50	51.1	102	17-153	
cis-1,2-Dichloroethene	ug/L	50	48.4	97	68-129	
cis-1,3-Dichloropropene	ug/L	50	56.6	113	72-138	
Dibromochloromethane	ug/L	50	51.8	104	49-146	
Dibromomethane	ug/L	50	53.8	108	56-145	
Enflurane	ug/L	50	45.0	90	56-135	
Ethylbenzene	ug/L	50	53.7	107	66-126	
Haloether 229	ug/L	50	31.8	64	62-123	
Haloether 406	ug/L	50	42.2	84	62-134	
Haloether 421	ug/L	50	40.5	81	70-128	
Haloether 427	ug/L	50	44.3	89	69-153	
Haloether 428	ug/L	50	43.9	88	70-134	
Haloether 508	ug/L	50	44.1	88	52-139	
Haloether 528	ug/L	50	34.8	70	48-157	
Halomar	ug/L	50	43.4	87	62-128	
Isoflurane	ug/L	50	43.9	88	61-132	
m&p-Xylene	ug/L	100	104	104	65-129	
Methoxyflurane	ug/L	50	42.4	85	72-124	
Methylene Chloride	ug/L	50	47.4	95	46-168	
o-Xylene	ug/L	50	53.0	106	65-124	
Styrene	ug/L	50	56.1	112	72-133	
Tetrachloroethene	ug/L	50	56.9	114	46-157	
Toluene	ug/L	50	51.6	103	69-126	
Total Haloether	ug/L		456			
trans-1,2-Dichloroethene	ug/L	50	47.4	95	60-129	
trans-1,3-Dichloropropene	ug/L	50	56.8	114	59-149	
Trichloroethene	ug/L	50	49.3	99	67-132	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067491

LABORATORY CONTROL SAMPLE: 419741

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichlorofluoromethane	ug/L	50	55.3	111	39-171	
Vinyl chloride	ug/L	50	51.5	103	27-149	
4-Bromofluorobenzene (S)	%.			94	68-124	
Dibromofluoromethane (S)	%.			96	72-126	
Toluene-d8 (S)	%.			101	79-119	

LABORATORY CONTROL SAMPLE: 420040

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.7	109	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	52.4	105	15-179	
1,1,2-Trichloroethane	ug/L	50	53.5	107	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	48.8	98	38-121	
1,1-Dichloroethane	ug/L	50	53.1	106	63-129	
1,1-Dichloroethene	ug/L	50	49.2	98	51-139	
1,2,3-Trichloropropane	ug/L	50	55.1	110	13-187	
1,2-Dichloroethane	ug/L	50	55.7	111	57-148	
1,2-Dichloropropane	ug/L	50	55.4	111	66-128	
2-Butanone (MEK)	ug/L	50	56.8	114	32-183	
2-Hexanone	ug/L	50	58.4	117	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	58.0	116	26-171	
Acetone	ug/L	50	63.6	127	22-165	
Acrolein	ug/L	50	47.9	96	10-131	
Acrylonitrile	ug/L	50	52.2	104	18-149	
Benzene	ug/L	50	53.0	106	62-131	
Bromodichloromethane	ug/L	50	57.9	116	69-132	
Bromoform	ug/L	50	54.2	108	35-166	
Bromomethane	ug/L	50	52.5	105	34-158	
Carbon disulfide	ug/L	50	48.2	96	31-128	
Carbon tetrachloride	ug/L	50	57.4	115	54-144	
Chlorobenzene	ug/L	50	54.5	109	70-127	
Chloroethane	ug/L	50	49.7	99	17-195	
Chloroform	ug/L	50	51.5	103	73-134	
Chloromethane	ug/L	50	50.8	102	17-153	
cis-1,2-Dichloroethene	ug/L	50	50.3	101	68-129	
cis-1,3-Dichloropropene	ug/L	50	58.1	116	72-138	
Dibromochloromethane	ug/L	50	52.1	104	49-146	
Dibromomethane	ug/L	50	52.8	106	56-145	
Enflurane	ug/L	50	48.4	97	56-135	
Ethylbenzene	ug/L	50	52.7	105	66-126	
Haloether 229	ug/L	50	35.7	71	62-123	
Haloether 406	ug/L	50	45.0	90	62-134	
Haloether 421	ug/L	50	42.8	86	70-128	
Haloether 427	ug/L	50	46.6	93	69-153	
Haloether 428	ug/L	50	46.9	94	70-134	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067491

LABORATORY CONTROL SAMPLE: 420040

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Haloether 508	ug/L	50	47.0	94	52-139	
Haloether 528	ug/L	50	38.4	77	48-157	
Halomar	ug/L	50	47.0	94	62-128	
Isoflurane	ug/L	50	47.0	94	61-132	
m&p-Xylene	ug/L	100	104	104	65-129	
Methoxyflurane	ug/L	50	44.5	89	72-124	
Methylene Chloride	ug/L	50	52.7	105	46-168	
o-Xylene	ug/L	50	51.7	103	65-124	
Styrene	ug/L	50	55.3	111	72-133	
Tetrachloroethene	ug/L	50	59.7	119	46-157	
Toluene	ug/L	50	52.1	104	69-126	
Total Haloether	ug/L		489			
trans-1,2-Dichloroethene	ug/L	50	52.5	105	60-129	
trans-1,3-Dichloropropene	ug/L	50	56.6	113	59-149	
Trichloroethene	ug/L	50	52.4	105	67-132	
Trichlorofluoromethane	ug/L	50	55.5	111	39-171	
Vinyl chloride	ug/L	50	50.9	102	27-149	
4-Bromofluorobenzene (S)	%.			98	68-124	
Dibromofluoromethane (S)	%.			98	72-126	
Toluene-d8 (S)	%.			100	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 419742 419743

Parameter	Units	2067491004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	54.9	52.1	110	104	54-137	5	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	52.0	53.5	104	107	15-187	3	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	54.7	52.7	109	105	59-148	4	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	40.7	39.1	81	78	40-117	4	20	
1,1-Dichloroethane	ug/L	ND	50	50	53.3	48.8	107	98	59-133	9	20	
1,1-Dichloroethene	ug/L	ND	50	50	43.1	40.6	86	81	44-146	6	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	56.1	54.4	112	109	14-199	3	20	
1,2-Dichloroethane	ug/L	ND	50	50	56.4	53.9	113	108	56-154	5	20	
1,2-Dichloropropane	ug/L	ND	50	50	56.5	54.6	113	109	62-135	4	20	
2-Butanone (MEK)	ug/L	ND	50	50	52.5	52.8	105	106	20-205	1	20	
2-Hexanone	ug/L	ND	50	50	58.4	55.7	117	111	25-189	5	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	59.5	57.4	119	115	23-184	4	20	
Acetone	ug/L	ND	50	50	57.9	54.3	116	109	11-217	6	20	
Acrolein	ug/L	ND	50	50	49.9	48.3	100	97	10-142	3	20	
Acrylonitrile	ug/L	ND	50	50	54.0	52.2	108	104	20-164	3	20	
Benzene	ug/L	ND	50	50	53.1	50.3	106	101	52-141	5	20	
Bromodichloromethane	ug/L	ND	50	50	59.1	57.3	118	115	70-134	3	20	
Bromoform	ug/L	1.1	50	50	53.9	51.0	106	100	37-171	5	20	
Bromomethane	ug/L	ND	50	50	56.2	52.7	112	105	34-155	7	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067491

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 419742 419743

Parameter	Units	2067491004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Carbon disulfide	ug/L	ND	50	50	39.2	34.9	78	70	28-130	12	20	
Carbon tetrachloride	ug/L	ND	50	50	55.9	55.6	112	111	48-146	1	20	
Chlorobenzene	ug/L	ND	50	50	55.9	52.8	112	106	67-129	6	20	
Chloroethane	ug/L	ND	50	50	54.9	52.6	110	105	12-192	4	20	
Chloroform	ug/L	ND	50	50	52.0	49.4	103	98	66-143	5	20	
Chloromethane	ug/L	ND	50	50	54.6	52.2	109	104	14-155	5	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	51.5	47.6	103	95	56-141	8	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	57.8	56.1	116	112	70-139	3	20	
Dibromochloromethane	ug/L	ND	50	50	51.4	49.9	103	100	50-150	3	20	
Dibromomethane	ug/L	ND	50	50	56.3	53.3	113	107	58-153	6	20	
Enflurane	ug/L	ND	50	50	48.3	45.6	97	91	63-126	6	20	
Ethylbenzene	ug/L	ND	50	50	54.9	53.1	110	106	57-135	3	20	
Haloether 229	ug/L	1.4	50	50	36.0	34.8	69	67	56-127	4	20	
Haloether 406	ug/L	ND	50	50	45.4	43.0	91	86	68-128	5	20	
Haloether 421	ug/L	ND	50	50	44.5	42.9	89	86	74-120	4	20	
Haloether 427	ug/L	ND	50	50	49.5	49.7	99	99	78-120	0	20	
Haloether 428	ug/L	ND	50	50	48.8	48.3	98	97	74-125	1	20	
Haloether 508	ug/L	3.6	50	50	48.7	48.5	90	90	28-156	0	20	
Haloether 528	ug/L	ND	50	50	37.5	35.2	75	70	45-142	6	20	
Halomar	ug/L	ND	50	50	45.9	43.8	92	88	67-123	5	20	
Isoflurane	ug/L	8.1	50	50	55.3	52.3	94	88	45-140	6	20	
m&p-Xylene	ug/L	ND	100	100	106	102	106	102	56-136	4	20	
Methoxyflurane	ug/L	ND	50	50	45.4	44.1	91	88	75-119	3	20	
Methylene Chloride	ug/L	ND	50	50	47.7	44.3	95	89	45-166	7	20	
o-Xylene	ug/L	ND	50	50	52.1	52.7	104	105	57-133	1	20	
Styrene	ug/L	ND	50	50	55.0	54.6	110	109	58-144	1	20	
Tetrachloroethene	ug/L	ND	50	50	59.6	58.4	119	117	48-143	2	20	
Toluene	ug/L	ND	50	50	54.1	51.8	108	104	59-136	4	20	
Total Haloether	ug/L	13.1			505	488				3		
trans-1,2-Dichloroethene	ug/L	ND	50	50	49.8	44.6	100	89	57-132	11	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	56.4	55.8	113	112	59-154	1	20	
Trichloroethene	ug/L	ND	50	50	53.6	49.2	107	98	58-140	8	20	
Trichlorofluoromethane	ug/L	ND	50	50	58.7	55.6	117	111	24-175	5	20	
Vinyl chloride	ug/L	ND	50	50	57.7	53.2	115	106	21-150	8	20	
4-Bromofluorobenzene (S)	%.						95	100	68-124			
Dibromofluoromethane (S)	%.						98	95	72-126			
Toluene-d8 (S)	%.						100	101	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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St. Rose, LA 70087
(504)469-0333

QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2067491

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

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St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2067491

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2067491001	**TB-20171211**	EPA 5030B/8260	97501		
2067491002	**EB-20171211**	EPA 5030B/8260	97501		
2067491003	**FB-20171211**	EPA 5030B/8260	97501		
2067491004	**MW-1A-2**	EPA 5030B/8260	97501		
2067491005	**MW-6-90**	EPA 5030B/8260	97501		
2067491006	**EB-20171212**	EPA 5030B/8260	97501		
2067491007	**FB-20171212**	EPA 5030B/8260	97501		
2067491008	**MW-11-20**	EPA 5030B/8260	97501		
2067491009	**MW-19-90**	EPA 5030B/8260	97501		
2067491010	**EB-20171213**	EPA 5030B/8260	97501		
2067491011	**FB-20171213**	EPA 5030B/8260	97501		
2067491012	**MW-15-90**	EPA 5030B/8260	97501		
2067491013	**MW-17-90**	EPA 5030B/8260	97501		

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WO# : 2067491

2067491

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17(
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171211	WT	G			12/11/17	LAB		2				2							X			
2	EB-20171211	WT	G			12/11/17	0800		3				3						X				
3	FB-20171211	WT	G			12/11/17	1012		3				3						X				
4	MW-1A-2	WT	G			12/11/17	1119		3				3						X				
5	MW-6-90	WT	G			12/11/17	1240		3				3						X				
6	EB-20171212	WT	G			12/12/17	0740		3				3						X				
7	FB-20171212	WT	G			12/12/17	0934		3				3						X				
8	MW-11-20	WT	G			12/12/17	1059		3				3						X				
9	MW-19-90	WT	G			12/12/17	1258		3				3						X				
10	EB-20171213	WT	G			12/13/17	0747		3				3						X				
11	FB-20171213	WT	G			12/13/17	0934		3				3						X				
12	MW-15-90	WT	G			12/13/17	1108		3				3						X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colón Arcadis	12/18/17	1418	[illegible]	12/14/17	0:19	30	Y	N	Y
				Fed Ex						
	Fed Ex	12/19/17	0915	[illegible]	12/19/17	0915	1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Andrés Colón
SIGNATURE of SAMPLER:	[illegible]
DATE Signed:	12/14/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	MW-17-90	WT	G			12/13/17	1324		3				3					X				
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andrew Colon Arcadis	12/14/17	1819	PACE	12/14/17	18:19	30	Y	U	Y
	FedEx 12/19/17 0915			FedEx 12/19/17 0915			1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/14/17

WO#: 2067491

PM: CJM Due Date: 01/04/18
CLIENT: 20-CHEV-ARC

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon R

Proj

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: (Wet) Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12-21-17

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐Yes	☑No	☐N/A	1	
Chain of Custody Present:	☑Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6	
Sufficient Volume:	☑Yes	☐No	☐N/A	7	
Correct Containers Used:	☑Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☑No	☐N/A	9	
Sample Labels match COC:	☐Yes	☑No	☐N/A	10	See below
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14	
Trip Blank Present:	☑Yes	☐No		15	

Client Notification/ Resolution:

Person Contacted: E. Vavela Date/Time: 12-21-17/1150

Comments/ Resolution: Sample on 12/13 @ 11:08 should be mw-15-90 is labeled as mw-11-20. There is a set of mw-11-20 on 12/12 @ 10:59. Sample 12/12 @ 09:34 is labeled as mw-15-90 should be FB-20171213

Run Sample with the time of 0934 as FB-20171213

Ch

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

December 29, 2017

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2067700

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 23, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2067700

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2067700

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2067700001	**TB-20171219**	Water	12/19/17 00:00	12/23/17 09:45
2067700002	**EB-20171219**	Water	12/19/17 08:20	12/23/17 09:45
2067700003	**FB-20171219**	Water	12/19/17 09:40	12/23/17 09:45
2067700004	**MW-22-90**	Water	12/19/17 11:15	12/23/17 09:45
2067700005	**GWDUP002**	Water	12/19/17 00:00	12/23/17 09:45
2067700006	**AN-1**	Water	12/19/17 14:19	12/23/17 09:45
2067700007	**EB-20171220**	Water	12/20/17 08:10	12/23/17 09:45
2067700008	**MW-4-90**	Water	12/20/17 11:08	12/23/17 09:45
2067700009	**FB-20171220**	Water	12/20/17 11:10	12/23/17 09:45
2067700010	**OW-1**	Water	12/20/17 13:10	12/23/17 09:45
2067700011	**PCMW-5**	Water	12/20/17 13:47	12/23/17 09:45
2067700012	**FB-20171221**	Water	12/21/17 09:33	12/23/17 09:45
2067700013	**EB-20171221**	Water	12/21/17 08:40	12/23/17 09:45
2067700014	**AN-2**	Water	12/21/17 10:19	12/23/17 09:45
2067700015	**MW-5-90**	Water	12/21/17 11:13	12/23/17 09:45

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2067700

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2067700001	**TB-20171219**	EPA 5030B/8260	GEM	56	PASI-N
2067700002	**EB-20171219**	EPA 5030B/8260	GEM	56	PASI-N
2067700003	**FB-20171219**	EPA 5030B/8260	GEM	56	PASI-N
2067700004	**MW-22-90**	EPA 5030B/8260	GEM	56	PASI-N
2067700005	**GWDUP002**	EPA 5030B/8260	GEM	56	PASI-N
2067700006	**AN-1**	EPA 5030B/8260	GEM	56	PASI-N
2067700007	**EB-20171220**	EPA 5030B/8260	GEM	56	PASI-N
2067700008	**MW-4-90**	EPA 5030B/8260	GEM	56	PASI-N
2067700009	**FB-20171220**	EPA 5030B/8260	GEM	56	PASI-N
2067700010	**OW-1**	EPA 5030B/8260	GEM	56	PASI-N
2067700011	**PCMW-5**	EPA 5030B/8260	GEM	56	PASI-N
2067700012	**FB-20171221**	EPA 5030B/8260	GEM	56	PASI-N
2067700013	**EB-20171221**	EPA 5030B/8260	GEM	56	PASI-N
2067700014	**AN-2**	EPA 5030B/8260	GEM	56	PASI-N
2067700015	**MW-5-90**	EPA 5030B/8260	GEM	56	PASI-N

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St. Rose, LA 70087
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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2067700

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: December 29, 2017

General Information:
15 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: TB-20171219 **Lab ID: 2067700001** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 12:22	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:22	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:22	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:22	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:22		
Halomar	ND	ug/L	1.0	1		12/27/17 12:22		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:22	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:22		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:22	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:22	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:22	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: TB-20171219 **Lab ID: 2067700001** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:22	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 12:22	2037-26-5	
4-Bromofluorobenzene (S)	111	%.	68-124	1		12/27/17 12:22	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 12:22	1868-53-7	

Sample: EB-20171219 **Lab ID: 2067700002** Collected: 12/19/17 08:20 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.4**	ug/L	4.0	1		12/27/17 12:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:40		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171219 **Lab ID: 2067700002** Collected: 12/19/17 08:20 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:40		
Halomar	ND	ug/L	1.0	1		12/27/17 12:40		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:40	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:40		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:40	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 12:40	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 12:40	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/27/17 12:40	1868-53-7	

Sample: FB-20171219 **Lab ID: 2067700003** Collected: 12/19/17 09:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**10.7**	ug/L	4.0	1		12/27/17 12:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:57	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:57	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: FB-20171219 **Lab ID: 2067700003** Collected: 12/19/17 09:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:57		
Halomar	ND	ug/L	1.0	1		12/27/17 12:57		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:57		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:57	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:57	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:57	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 12:57	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		12/27/17 12:57	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 12:57	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-22-90 **Lab ID: 2067700004** Collected: 12/19/17 11:15 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 13:15	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 13:15	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 13:15	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 13:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 13:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 13:15	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 13:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 13:15	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 13:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 13:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 13:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 13:15	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 13:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 13:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 13:15	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 13:15	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 13:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:15	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 13:15	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 13:15	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 406	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 421	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 427	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 428	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 508	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 528	ND	ug/L	1.0	1		12/27/17 13:15		
Halomar	ND	ug/L	1.0	1		12/27/17 13:15		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 13:15	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 13:15		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 13:15	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 13:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 13:15	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 13:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 13:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 13:15	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 13:15	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 13:15		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-22-90 **Lab ID: 2067700004** Collected: 12/19/17 11:15 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 13:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 13:15	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 13:15	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 13:15	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 13:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 13:15	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/27/17 13:15	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 13:15	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/27/17 13:15	1868-53-7	

Sample: GWDUP002 **Lab ID: 2067700005** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 13:51	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 13:51	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 13:51	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 13:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 13:51	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 13:51	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 13:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 13:51	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 13:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 13:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 13:51	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 13:51	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 13:51	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 13:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 13:51	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 13:51	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 13:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:51	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 13:51	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 13:51	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 406	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 421	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 427	ND	ug/L	1.0	1		12/27/17 13:51		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: GWDUP002 **Lab ID: 2067700005** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 508	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 528	ND	ug/L	1.0	1		12/27/17 13:51		
Halomar	ND	ug/L	1.0	1		12/27/17 13:51		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 13:51	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 13:51		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 13:51	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 13:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 13:51	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 13:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 13:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 13:51	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 13:51	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 13:51		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 13:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 13:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 13:51	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 13:51	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 13:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 13:51	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 13:51	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/27/17 13:51	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/27/17 13:51	1868-53-7	

Sample: AN-1 **Lab ID: 2067700006** Collected: 12/19/17 14:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 12:04	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:04	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:04	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:04	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:04	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:04	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:04	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: AN-1 **Lab ID: 2067700006** Collected: 12/19/17 14:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:04	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:04	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:04	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:04	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:04	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:04		
Halomar	ND	ug/L	1.0	1		12/27/17 12:04		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:04	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:04		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:04	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:04	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:04	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:04	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:04		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:04	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:04	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:04	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/27/17 12:04	2037-26-5	
4-Bromofluorobenzene (S)	110	%.	68-124	1		12/27/17 12:04	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 12:04	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171220 **Lab ID: 2067700007** Collected: 12/20/17 08:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**13.5**	ug/L	4.0	1		12/27/17 14:08	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 14:08	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 14:08	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 14:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 14:08	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		12/27/17 14:08	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 14:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 14:08	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 14:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 14:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 14:08	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 14:08	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 14:08	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 14:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 14:08	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 14:08	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 14:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:08	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 14:08	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 14:08	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 406	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 421	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 427	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 428	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 508	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 528	ND	ug/L	1.0	1		12/27/17 14:08		
Halomar	ND	ug/L	1.0	1		12/27/17 14:08		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 14:08	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 14:08		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 14:08	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 14:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 14:08	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 14:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 14:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 14:08	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 14:08	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 14:08		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	79-01-6	

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(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171220 **Lab ID: 2067700007** Collected: 12/20/17 08:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 14:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 14:08	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 14:08	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 14:08	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 14:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 14:08	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 14:08	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 14:08	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 14:08	1868-53-7	

Sample: MW-4-90 **Lab ID: 2067700008** Collected: 12/20/17 11:08 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 14:26	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 14:26	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 14:26	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 14:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 14:26	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 14:26	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 14:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 14:26	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 14:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 14:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 14:26	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 14:26	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 14:26	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 14:26	74-87-3	
Dibromochloromethane	**1.0**	ug/L	1.0	1		12/27/17 14:26	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 14:26	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 14:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:26	10061-02-6	
Enflurane	**6.9**	ug/L	1.0	1		12/27/17 14:26	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 14:26	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 406	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 421	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 427	ND	ug/L	1.0	1		12/27/17 14:26		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-4-90 **Lab ID: 2067700008** Collected: 12/20/17 11:08 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 508	**5.0**	ug/L	1.0	1		12/27/17 14:26		
Haloether 528	ND	ug/L	1.0	1		12/27/17 14:26		
Halomar	**5.0**	ug/L	1.0	1		12/27/17 14:26		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 14:26	591-78-6	
Isoflurane	**7.3**	ug/L	1.0	1		12/27/17 14:26		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 14:26	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 14:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 14:26	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 14:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 14:26	79-34-5	
Tetrachloroethene	**1.0**	ug/L	1.0	1		12/27/17 14:26	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 14:26	108-88-3	
Total Haloether	**24.2**	ug/L	1.0	1		12/27/17 14:26		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 14:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 14:26	96-18-4	
1,1,2-Trichlorotrifluoroethane	**3.0**	ug/L	1.0	1		12/27/17 14:26	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 14:26	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 14:26	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 14:26	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/27/17 14:26	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		12/27/17 14:26	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 14:26	1868-53-7	

Sample: FB-20171220 **Lab ID: 2067700009** Collected: 12/20/17 11:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 14:44	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 14:44	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 14:44	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 14:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 14:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 14:44	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 14:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 14:44	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 14:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 14:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 14:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 14:44	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 14:44	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: FB-20171220 **Lab ID: 2067700009** Collected: 12/20/17 11:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 14:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 14:44	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 14:44	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 14:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:44	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 14:44	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 14:44	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 406	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 421	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 427	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 428	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 508	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 528	ND	ug/L	1.0	1		12/27/17 14:44		
Halomar	ND	ug/L	1.0	1		12/27/17 14:44		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 14:44	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 14:44		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 14:44	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 14:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 14:44	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 14:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 14:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 14:44	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 14:44	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 14:44		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 14:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 14:44	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 14:44	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 14:44	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 14:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 14:44	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 14:44	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		12/27/17 14:44	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/27/17 14:44	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: OW-1 **Lab ID: 2067700010** Collected: 12/20/17 13:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 17:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 17:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 17:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 17:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 17:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 17:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 17:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 17:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 17:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 17:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 17:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 17:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 17:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 17:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 17:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 17:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 17:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 17:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 17:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 17:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 17:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 406	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 421	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 427	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 428	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 508	**47.8**	ug/L	1.0	1		12/27/17 17:40		
Haloether 528	ND	ug/L	1.0	1		12/27/17 17:40		
Halomar	ND	ug/L	1.0	1		12/27/17 17:40		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 17:40	591-78-6	
Isoflurane	**1.7**	ug/L	1.0	1		12/27/17 17:40		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 17:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 17:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 17:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 17:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 17:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 17:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 17:40	108-88-3	
Total Haloether	**49.5**	ug/L	1.0	1		12/27/17 17:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: OW-1 **Lab ID: 2067700010** Collected: 12/20/17 13:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 17:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 17:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 17:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 17:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 17:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 17:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 17:40	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/27/17 17:40	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/27/17 17:40	1868-53-7	

Sample: PCMW-5 **Lab ID: 2067700011** Collected: 12/20/17 13:47 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 15:19	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 15:19	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 15:19	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 15:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 15:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 15:19	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 15:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 15:19	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 15:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 15:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 15:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 15:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 15:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 15:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 15:19	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 15:19	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 15:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:19	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 15:19	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 15:19	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 406	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 421	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 427	ND	ug/L	1.0	1		12/27/17 15:19		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: PCMW-5 **Lab ID: 2067700011** Collected: 12/20/17 13:47 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 508	**6.9**	ug/L	1.0	1		12/27/17 15:19		
Haloether 528	ND	ug/L	1.0	1		12/27/17 15:19		
Halomar	ND	ug/L	1.0	1		12/27/17 15:19		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 15:19	591-78-6	
Isoflurane	**1.8**	ug/L	1.0	1		12/27/17 15:19		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 15:19	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 15:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 15:19	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 15:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 15:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 15:19	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 15:19	108-88-3	
Total Haloether	**8.7**	ug/L	1.0	1		12/27/17 15:19		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 15:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 15:19	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 15:19	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 15:19	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 15:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 15:19	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		12/27/17 15:19	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/27/17 15:19	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/27/17 15:19	1868-53-7	

Sample: FB-20171221 **Lab ID: 2067700012** Collected: 12/21/17 09:33 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.3**	ug/L	4.0	1		12/27/17 15:37	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 15:37	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 15:37	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 15:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 15:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 15:37	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 15:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 15:37	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 15:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 15:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 15:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 15:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 15:37	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: FB-20171221 **Lab ID: 2067700012** Collected: 12/21/17 09:33 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 15:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 15:37	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 15:37	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 15:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:37	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 15:37	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 15:37	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 406	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 421	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 427	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 428	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 508	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 528	ND	ug/L	1.0	1		12/27/17 15:37		
Halomar	ND	ug/L	1.0	1		12/27/17 15:37		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 15:37	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 15:37		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 15:37	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 15:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 15:37	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 15:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 15:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 15:37	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 15:37	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 15:37		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 15:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 15:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 15:37	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 15:37	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 15:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 15:37	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/27/17 15:37	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 15:37	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/27/17 15:37	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171221 **Lab ID: 2067700013** Collected: 12/21/17 08:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.9**	ug/L	4.0	1		12/27/17 15:55	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 15:55	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 15:55	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 15:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 15:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 15:55	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 15:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 15:55	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 15:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 15:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 15:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 15:55	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 15:55	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 15:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 15:55	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 15:55	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 15:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:55	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 15:55	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 15:55	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 406	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 421	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 427	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 428	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 508	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 528	ND	ug/L	1.0	1		12/27/17 15:55		
Halomar	ND	ug/L	1.0	1		12/27/17 15:55		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 15:55	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 15:55		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 15:55	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 15:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 15:55	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 15:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 15:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 15:55	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 15:55	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 15:55		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171221 **Lab ID: 2067700013** Collected: 12/21/17 08:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 15:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 15:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 15:55	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 15:55	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 15:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 15:55	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/27/17 15:55	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/27/17 15:55	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/27/17 15:55	1868-53-7	

Sample: AN-2 **Lab ID: 2067700014** Collected: 12/21/17 10:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 16:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 16:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 16:12	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 16:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 16:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 16:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 16:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 16:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 16:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 16:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 16:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 16:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 16:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 16:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 16:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 16:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 16:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 16:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 16:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 406	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 421	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 427	ND	ug/L	1.0	1		12/27/17 16:12		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: AN-2 **Lab ID: 2067700014** Collected: 12/21/17 10:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 508	**3.1**	ug/L	1.0	1		12/27/17 16:12		
Haloether 528	ND	ug/L	1.0	1		12/27/17 16:12		
Halomar	ND	ug/L	1.0	1		12/27/17 16:12		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 16:12	591-78-6	
Isoflurane	**7.1**	ug/L	1.0	1		12/27/17 16:12		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 16:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 16:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 16:12	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 16:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 16:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 16:12	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 16:12	108-88-3	
Total Haloether	**10.2**	ug/L	1.0	1		12/27/17 16:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 16:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 16:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 16:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 16:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 16:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 16:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/27/17 16:12	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		12/27/17 16:12	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/27/17 16:12	1868-53-7	

Sample: MW-5-90 **Lab ID: 2067700015** Collected: 12/21/17 11:13 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 16:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 16:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 16:30	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 16:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 16:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 16:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 16:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 16:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 16:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 16:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 16:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 16:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 16:30	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-5-90 **Lab ID: 2067700015** Collected: 12/21/17 11:13 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 16:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 16:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 16:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 16:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 16:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 16:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 406	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 421	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 427	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 428	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 508	**3.4**	ug/L	1.0	1		12/27/17 16:30		
Haloether 528	ND	ug/L	1.0	1		12/27/17 16:30		
Halomar	ND	ug/L	1.0	1		12/27/17 16:30		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 16:30	591-78-6	
Isoflurane	**8.5**	ug/L	1.0	1		12/27/17 16:30		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 16:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 16:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 16:30	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 16:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 16:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 16:30	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 16:30	108-88-3	
Total Haloether	**11.8**	ug/L	1.0	1		12/27/17 16:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 16:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 16:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 16:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 16:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 16:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 16:30	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 16:30	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/27/17 16:30	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/27/17 16:30	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067700

QC Batch: 97814 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2067700001, 2067700002, 2067700003, 2067700004, 2067700005, 2067700006, 2067700007, 2067700008, 2067700009, 2067700010, 2067700011, 2067700012, 2067700013, 2067700014, 2067700015

METHOD BLANK: 421107 | Matrix: Water
Associated Lab Samples: 2067700001, 2067700002, 2067700003, 2067700004, 2067700005, 2067700006, 2067700007, 2067700008, 2067700009, 2067700010, 2067700011, 2067700012, 2067700013, 2067700014, 2067700015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/27/17 10:15	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/27/17 10:15	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/27/17 10:15	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	12/27/17 10:15	
1,1-Dichloroethane	ug/L	ND	1.0	12/27/17 10:15	
1,1-Dichloroethene	ug/L	ND	1.0	12/27/17 10:15	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/27/17 10:15	
1,2-Dichloroethane	ug/L	ND	1.0	12/27/17 10:15	
1,2-Dichloropropane	ug/L	ND	1.0	12/27/17 10:15	
2-Butanone (MEK)	ug/L	ND	2.0	12/27/17 10:15	
2-Hexanone	ug/L	ND	2.0	12/27/17 10:15	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	12/27/17 10:15	
Acetone	ug/L	ND	4.0	12/27/17 10:15	
Acrolein	ug/L	ND	8.0	12/27/17 10:15	
Acrylonitrile	ug/L	ND	4.0	12/27/17 10:15	
Benzene	ug/L	ND	1.0	12/27/17 10:15	
Bromodichloromethane	ug/L	ND	1.0	12/27/17 10:15	
Bromoform	ug/L	ND	1.0	12/27/17 10:15	
Bromomethane	ug/L	ND	1.0	12/27/17 10:15	
Carbon disulfide	ug/L	ND	1.0	12/27/17 10:15	
Carbon tetrachloride	ug/L	ND	1.0	12/27/17 10:15	
Chlorobenzene	ug/L	ND	1.0	12/27/17 10:15	
Chloroethane	ug/L	ND	1.0	12/27/17 10:15	
Chloroform	ug/L	ND	1.0	12/27/17 10:15	
Chloromethane	ug/L	ND	1.0	12/27/17 10:15	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/27/17 10:15	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/27/17 10:15	
Dibromochloromethane	ug/L	ND	1.0	12/27/17 10:15	
Dibromomethane	ug/L	ND	1.0	12/27/17 10:15	
Enflurane	ug/L	ND	1.0	12/27/17 10:15	
Ethylbenzene	ug/L	ND	1.0	12/27/17 10:15	
Haloether 229	ug/L	ND	1.0	12/27/17 10:15	
Haloether 406	ug/L	ND	1.0	12/27/17 10:15	
Haloether 421	ug/L	ND	1.0	12/27/17 10:15	
Haloether 427	ug/L	ND	1.0	12/27/17 10:15	
Haloether 428	ug/L	ND	1.0	12/27/17 10:15	
Haloether 508	ug/L	ND	1.0	12/27/17 10:15	
Haloether 528	ug/L	ND	1.0	12/27/17 10:15	
Halomar	ug/L	ND	1.0	12/27/17 10:15	
Isoflurane	ug/L	ND	1.0	12/27/17 10:15	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067700

METHOD BLANK: 421107 Matrix: Water

Associated Lab Samples: 2067700001, 2067700002, 2067700003, 2067700004, 2067700005, 2067700006, 2067700007, 2067700008, 2067700009, 2067700010, 2067700011, 2067700012, 2067700013, 2067700014, 2067700015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	12/27/17 10:15	
Methoxyflurane	ug/L	ND	1.0	12/27/17 10:15	
Methylene Chloride	ug/L	ND	5.0	12/27/17 10:15	
o-Xylene	ug/L	ND	1.0	12/27/17 10:15	
Styrene	ug/L	ND	1.0	12/27/17 10:15	
Tetrachloroethene	ug/L	ND	1.0	12/27/17 10:15	
Toluene	ug/L	ND	1.0	12/27/17 10:15	
Total Haloether	ug/L	ND	1.0	12/27/17 10:15	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/27/17 10:15	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/27/17 10:15	
Trichloroethene	ug/L	ND	1.0	12/27/17 10:15	
Trichlorofluoromethane	ug/L	ND	1.0	12/27/17 10:15	
Vinyl chloride	ug/L	ND	1.0	12/27/17 10:15	
4-Bromofluorobenzene (S)	%.	108	68-124	12/27/17 10:15	
Dibromofluoromethane (S)	%.	95	72-126	12/27/17 10:15	
Toluene-d8 (S)	%.	99	79-119	12/27/17 10:15	

LABORATORY CONTROL SAMPLE: 421108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.9	106	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	42.0	84	15-179	
1,1,2-Trichloroethane	ug/L	50	48.7	97	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	43.4	87	38-121	
1,1-Dichloroethane	ug/L	50	47.6	95	63-129	
1,1-Dichloroethene	ug/L	50	45.2	90	51-139	
1,2,3-Trichloropropane	ug/L	50	47.2	94	13-187	
1,2-Dichloroethane	ug/L	50	50.5	101	57-148	
1,2-Dichloropropane	ug/L	50	48.1	96	66-128	
2-Butanone (MEK)	ug/L	50	53.7	107	32-183	
2-Hexanone	ug/L	50	51.4	103	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	46.5	93	26-171	
Acetone	ug/L	50	70.2	140	22-165	
Acrolein	ug/L	50	27.7	55	10-131	
Acrylonitrile	ug/L	50	45.9	92	18-149	
Benzene	ug/L	50	47.2	94	62-131	
Bromodichloromethane	ug/L	50	55.6	111	69-132	
Bromoform	ug/L	50	52.6	105	35-166	
Bromomethane	ug/L	50	49.8	100	34-158	
Carbon disulfide	ug/L	50	44.0	88	31-128	
Carbon tetrachloride	ug/L	50	57.2	114	54-144	
Chlorobenzene	ug/L	50	52.2	104	70-127	
Chloroethane	ug/L	50	45.0	90	17-195	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067700

LABORATORY CONTROL SAMPLE: 421108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	50	47.4	95	73-134	
Chloromethane	ug/L	50	48.1	96	17-153	
cis-1,2-Dichloroethene	ug/L	50	46.9	94	68-129	
cis-1,3-Dichloropropene	ug/L	50	51.6	103	72-138	
Dibromochloromethane	ug/L	50	51.4	103	49-146	
Dibromomethane	ug/L	50	50.6	101	56-145	
Enflurane	ug/L	50	43.9	88	56-135	
Ethylbenzene	ug/L	50	49.5	99	66-126	
Haloether 229	ug/L	50	34.8	70	62-123	
Haloether 406	ug/L	50	40.0	80	62-134	
Haloether 421	ug/L	50	37.9	76	70-128	
Haloether 427	ug/L	50	46.4	93	69-153	
Haloether 428	ug/L	50	45.1	90	70-134	
Haloether 508	ug/L	50	42.2	84	52-139	
Haloether 528	ug/L	50	41.9	84	48-157	
Halomar	ug/L	50	40.7	81	62-128	
Isoflurane	ug/L	50	43.9	88	61-132	
m&p-Xylene	ug/L	100	100	100	65-129	
Methoxyflurane	ug/L	50	39.7	79	72-124	
Methylene Chloride	ug/L	50	45.0	90	46-168	
o-Xylene	ug/L	50	49.9	100	65-124	
Styrene	ug/L	50	52.0	104	72-133	
Tetrachloroethene	ug/L	50	60.5	121	46-157	
Toluene	ug/L	50	47.8	96	69-126	
Total Haloether	ug/L		457			
trans-1,2-Dichloroethene	ug/L	50	47.3	95	60-129	
trans-1,3-Dichloropropene	ug/L	50	51.9	104	59-149	
Trichloroethene	ug/L	50	50.1	100	67-132	
Trichlorofluoromethane	ug/L	50	53.9	108	39-171	
Vinyl chloride	ug/L	50	47.5	95	27-149	
4-Bromofluorobenzene (S)	%.			100	68-124	
Dibromofluoromethane (S)	%.			94	72-126	
Toluene-d8 (S)	%.			99	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 421109 421110

Parameter	Units	2067700006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	60.3	57.4	121	115	54-137	5	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	46.1	44.5	92	89	15-187	3	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	52.7	51.5	105	103	59-148	2	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	54.9	49.2	110	98	40-117	11	20	
1,1-Dichloroethane	ug/L	ND	50	50	54.0	51.7	108	103	59-133	4	20	
1,1-Dichloroethene	ug/L	ND	50	50	56.5	49.3	113	99	44-146	14	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	50.1	51.9	100	104	14-199	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067700

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 421109 421110

Parameter	Units	2067700006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	56.5	55.4	113	111	56-154	2	20	
1,2-Dichloropropane	ug/L	ND	50	50	55.1	53.5	110	107	62-135	3	20	
2-Butanone (MEK)	ug/L	ND	50	50	46.0	44.5	92	89	20-205	3	20	
2-Hexanone	ug/L	ND	50	50	48.7	48.0	97	96	25-189	1	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	50.1	50.1	100	100	23-184	0	20	
Acetone	ug/L	ND	50	50	51.8	50.8	104	102	11-217	2	20	
Acrolein	ug/L	ND	50	50	45.7	43.4	91	87	10-142	5	20	
Acrylonitrile	ug/L	ND	50	50	51.8	49.2	104	98	20-164	5	20	
Benzene	ug/L	ND	50	50	54.0	51.1	108	102	52-141	5	20	
Bromodichloromethane	ug/L	ND	50	50	60.6	59.0	121	118	70-134	3	20	
Bromoform	ug/L	ND	50	50	58.3	56.2	117	112	37-171	4	20	
Bromomethane	ug/L	ND	50	50	55.1	56.5	110	113	34-155	3	20	
Carbon disulfide	ug/L	ND	50	50	59.3	48.6	119	97	28-130	20	20	
Carbon tetrachloride	ug/L	ND	50	50	66.4	61.4	133	123	48-146	8	20	
Chlorobenzene	ug/L	ND	50	50	58.9	56.3	118	113	67-129	5	20	
Chloroethane	ug/L	ND	50	50	51.1	52.7	102	105	12-192	3	20	
Chloroform	ug/L	ND	50	50	53.1	51.0	106	102	66-143	4	20	
Chloromethane	ug/L	ND	50	50	55.2	54.7	110	109	14-155	1	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	52.9	51.2	106	102	56-141	3	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	57.2	56.0	114	112	70-139	2	20	
Dibromochloromethane	ug/L	ND	50	50	56.8	55.9	114	112	50-150	2	20	
Dibromomethane	ug/L	ND	50	50	55.4	52.6	111	105	58-153	5	20	
Enflurane	ug/L	ND	50	50	53.5	49.2	107	98	63-126	8	20	
Ethylbenzene	ug/L	ND	50	50	57.4	55.2	115	110	57-135	4	20	
Haloether 229	ug/L	ND	50	50	41.5	39.6	83	79	56-127	5	20	
Haloether 406	ug/L	ND	50	50	47.5	44.5	95	89	68-128	7	20	
Haloether 421	ug/L	ND	50	50	43.7	41.0	87	82	74-120	6	20	
Haloether 427	ug/L	ND	50	50	54.9	53.8	110	108	78-120	2	20	
Haloether 428	ug/L	ND	50	50	52.2	51.7	104	103	74-125	1	20	
Haloether 508	ug/L	ND	50	50	51.3	45.3	103	91	28-156	13	20	
Haloether 528	ug/L	ND	50	50	44.9	42.9	90	86	45-142	5	20	
Halomar	ug/L	ND	50	50	47.2	45.0	94	90	67-123	5	20	
Isoflurane	ug/L	ND	50	50	51.6	48.8	103	98	45-140	6	20	
m&p-Xylene	ug/L	ND	100	100	113	112	113	112	56-136	1	20	
Methoxyflurane	ug/L	ND	50	50	45.7	44.5	91	89	75-119	3	20	
Methylene Chloride	ug/L	ND	50	50	50.7	48.5	101	97	45-166	4	20	
o-Xylene	ug/L	ND	50	50	55.6	54.6	111	109	57-133	2	20	
Styrene	ug/L	ND	50	50	58.7	55.7	117	111	58-144	5	20	
Tetrachloroethene	ug/L	ND	50	50	70.5	68.1	141	136	48-143	3	20	
Toluene	ug/L	ND	50	50	54.5	51.5	109	103	59-136	6	20	
Total Haloether	ug/L	ND			534	506				5		
trans-1,2-Dichloroethene	ug/L	ND	50	50	55.4	52.1	111	104	57-132	6	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	57.0	54.1	114	108	59-154	5	20	
Trichloroethene	ug/L	ND	50	50	56.1	53.4	112	107	58-140	5	20	
Trichlorofluoromethane	ug/L	ND	50	50	61.0	61.0	122	122	24-175	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067700

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 421109 421110

Parameter	Units	2067700006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	ND	50	50	54.2	56.3	108	113	21-150	4	20	
4-Bromofluorobenzene (S)	%.						102	102	68-124			
Dibromofluoromethane (S)	%.						96	96	72-126			
Toluene-d8 (S)	%.						100	99	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2067700

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2067700

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2067700001	**TB-20171219**	EPA 5030B/8260	97814		
2067700002	**EB-20171219**	EPA 5030B/8260	97814		
2067700003	**FB-20171219**	EPA 5030B/8260	97814		
2067700004	**MW-22-90**	EPA 5030B/8260	97814		
2067700005	**GWDUP002**	EPA 5030B/8260	97814		
2067700006	**AN-1**	EPA 5030B/8260	97814		
2067700007	**EB-20171220**	EPA 5030B/8260	97814		
2067700008	**MW-4-90**	EPA 5030B/8260	97814		
2067700009	**FB-20171220**	EPA 5030B/8260	97814		
2067700010	**OW-1**	EPA 5030B/8260	97814		
2067700011	**PCMW-5**	EPA 5030B/8260	97814		
2067700012	**FB-20171221**	EPA 5030B/8260	97814		
2067700013	**EB-20171221**	EPA 5030B/8260	97814		
2067700014	**AN-2**	EPA 5030B/8260	97814		
2067700015	**MW-5-90**	EPA 5030B/8260	97814		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. A

WO# : 2067700

2067700

965988

Section A Required Client Information:

Company: Arcadis
Address: 48 City View Plaza Suite 401
Rd 165 KM 1.2 Guaynabo P.R. 00968
Email To:
Phone: Fax:
Requested Due Date/TAT: 10 days.

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Flores 25 9/2017 (PO# C000191 1.0005.176
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: craig.mccollum@pacelab.com
Pace Profile #: 1037 L12

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): Trip Blank	VOCs 8260 - Halo	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-20171219	WT	G			12/19/17	LAB		2				2					X			
2	EB-20171219	WT	G			12/19/17	0820		3				3						X		
3	FB-20171219	WT	G			12/19/17	0940		3				3						X		
4	MW-22-90	WT	G			12/19/17	1115		3				3						X		
5	GWDUP002	WT	G			12/19/17	/		3				3						X		
6	AN-1	WT	G			12/19/17	1419		3				3						X		
7	AN-1 (MS)	WT	G			12/19/17	1419		3				3						X		
8	AN-1 (MSD)	WT	G			12/19/17	1419		3				3						X		
9	EB-20171220	WT	G			12/20/17	0810		3				3						X		
10	MW-4-90	WT	G			12/20/17	1108		3				3						X		
11	FB-20171220	WT	G			12/20/17	1110		3				3						X		
12	OW-1	WT	G			12/20/17	1310		3				3						X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andy Colon / Arcadis	12/21/17	15:15	Pablo Guzman-Pace	12/21/17	15:15	4°C	Y	N	Y
	[illegible] / AEC	12/21/17	17:00	FedEx						
	FedEx	12/23/17	0945	[illegible]	12/23/17	0945	2.2	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andy Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12/21/17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

1965987

Section A Required Client Information:

Company: Arcadis
Address: 48 City View Plaza Suite 401 RD 165 Km 1.2 Guaynabo P.R. 00968
Email To:
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Fibers 2SAR2017 (P.O# 10001911.0005.196
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Craig.Mcclure@pacelabs.com
Pace Profile #: 1037 L12

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOC 8260 - Halos	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	PCMW-5	WT	G			12/20/17	1347		3				3					X		
2	FB-20171221	WT	G			12/21/17	0933		3				3					X		
3	EB-20171221	WT	G			12/21/17	0840		3				3					X		
4	AN-2	WT	G			12/21/17	1019		3				3					X		
5	MW-5-90	WT	G			12/21/17	1113		3				3					X		
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	12/21/17	1515	[illegible] / Pace	12/21/17	1515	4.8	Y	N	Y
	[illegible] / Pace	12/21/17	17:00	FedEx						
	FedEx	12/23/17	0945	[illegible] / Pace	12/23/17	0945	2.2	Y	Y	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Andrés Colom
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 12/21/17

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upc

WO#: 2067700
PM: CJM
Due Date: 01/10/18
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12/26/17 HMB

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☐No	☑N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15 2 voa vials >6mm

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

January 05, 2018

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2067983

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on December 29, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2067983

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2067983

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2067983001	**TB-20171227**	Water	12/27/17 00:00	12/29/17 08:20
2067983002	**EB-20171227**	Water	12/27/17 08:15	12/29/17 08:20
2067983003	**FB-20171227**	Water	12/27/17 09:07	12/29/17 08:20
2067983004	**MW-3A-1BR**	Water	12/27/17 09:57	12/29/17 08:20
2067983005	**MW-3A-2**	Water	12/27/17 10:57	12/29/17 08:20
2067983006	**MW-3A-3**	Water	12/27/17 11:58	12/29/17 08:20
2067983007	**EB-20171228**	Water	12/28/17 07:43	12/29/17 08:20
2067983008	**FB-20171228**	Water	12/28/17 08:18	12/29/17 08:20
2067983009	**FMW-4-20**	Water	12/28/17 11:34	12/29/17 08:20
2067983010	**FMW-4-90**	Water	12/28/17 13:04	12/29/17 08:20

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2067983

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2067983001	**TB-20171227**	EPA 5030B/8260	GEM	56	PASI-N
2067983002	**EB-20171227**	EPA 5030B/8260	GEM	56	PASI-N
2067983003	**FB-20171227**	EPA 5030B/8260	GEM	56	PASI-N
2067983004	**MW-3A-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2067983005	**MW-3A-2**	EPA 5030B/8260	GEM	56	PASI-N
2067983006	**MW-3A-3**	EPA 5030B/8260	GEM	56	PASI-N
2067983007	**EB-20171228**	EPA 5030B/8260	GEM	56	PASI-N
2067983008	**FB-20171228**	EPA 5030B/8260	GEM	56	PASI-N
2067983009	**FMW-4-20**	EPA 5030B/8260	GEM	56	PASI-N
2067983010	**FMW-4-90**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2067983

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: January 05, 2018

General Information:
10 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: TB-20171227 **Lab ID: 2067983001** Collected: 12/27/17 00:00 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 12:56	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 12:56	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 12:56	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 12:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 12:56	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 12:56	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 12:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 12:56	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 12:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 12:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 12:56	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 12:56	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 12:56	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 12:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 12:56	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 12:56	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 12:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:56	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 12:56	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 12:56	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 406	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 421	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 427	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 428	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 508	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 528	ND	ug/L	1.0	1		01/02/18 12:56		
Halomar	ND	ug/L	1.0	1		01/02/18 12:56		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 12:56	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 12:56		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 12:56	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 12:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 12:56	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 12:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 12:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 12:56	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 12:56	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 12:56		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: TB-20171227 **Lab ID: 2067983001** Collected: 12/27/17 00:00 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 12:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 12:56	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 12:56	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 12:56	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 12:56	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 12:56	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/02/18 12:56	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/02/18 12:56	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		01/02/18 12:56	1868-53-7	

Sample: EB-20171227 **Lab ID: 2067983002** Collected: 12/27/17 08:15 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 13:13	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 13:13	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 13:13	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 13:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 13:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 13:13	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 13:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 13:13	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 13:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 13:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 13:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 13:13	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 13:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 13:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 13:13	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 13:13	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 13:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:13	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 13:13	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 13:13	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 406	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 421	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 427	ND	ug/L	1.0	1		01/02/18 13:13		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: EB-20171227 **Lab ID: 2067983002** Collected: 12/27/17 08:15 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 508	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 528	ND	ug/L	1.0	1		01/02/18 13:13		
Halomar	ND	ug/L	1.0	1		01/02/18 13:13		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 13:13	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 13:13		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 13:13	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 13:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 13:13	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 13:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 13:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 13:13	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 13:13	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 13:13		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 13:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 13:13	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 13:13	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 13:13	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 13:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 13:13	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%.	79-119	1		01/02/18 13:13	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/02/18 13:13	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		01/02/18 13:13	1868-53-7	

Sample: FB-20171227 **Lab ID: 2067983003** Collected: 12/27/17 09:07 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 13:31	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 13:31	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 13:31	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 13:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 13:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 13:31	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 13:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 13:31	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 13:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 13:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 13:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 13:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 13:31	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FB-20171227 **Lab ID: 2067983003** Collected: 12/27/17 09:07 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/02/18 13:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 13:31	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 13:31	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 13:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:31	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 13:31	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 13:31	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 406	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 421	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 427	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 428	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 508	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 528	ND	ug/L	1.0	1		01/02/18 13:31		
Halomar	ND	ug/L	1.0	1		01/02/18 13:31		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 13:31	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 13:31		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 13:31	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 13:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 13:31	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 13:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 13:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 13:31	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 13:31	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 13:31		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 13:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 13:31	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 13:31	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 13:31	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 13:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 13:31	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/02/18 13:31	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/02/18 13:31	460-00-4	
Dibromofluoromethane (S)	109	%.	72-126	1		01/02/18 13:31	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-1BR **Lab ID: 2067983004** Collected: 12/27/17 09:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 12:38	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 12:38	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 12:38	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 12:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 12:38	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 12:38	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 12:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 12:38	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 12:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 12:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 12:38	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 12:38	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 12:38	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 12:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 12:38	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 12:38	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 12:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:38	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 12:38	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 12:38	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 406	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 421	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 427	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 428	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 508	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 528	ND	ug/L	1.0	1		01/02/18 12:38		
Halomar	ND	ug/L	1.0	1		01/02/18 12:38		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 12:38	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 12:38		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 12:38	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 12:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 12:38	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 12:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 12:38	79-34-5	
Tetrachloroethene	**2.5**	ug/L	1.0	1		01/02/18 12:38	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 12:38	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 12:38		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-1BR **Lab ID: 2067983004** Collected: 12/27/17 09:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 12:38	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 12:38	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 12:38	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 12:38	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 12:38	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 12:38	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/02/18 12:38	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/02/18 12:38	460-00-4	
Dibromofluoromethane (S)	109	%.	72-126	1		01/02/18 12:38	1868-53-7	

Sample: MW-3A-2 **Lab ID: 2067983005** Collected: 12/27/17 10:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 13:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 13:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 13:49	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 13:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 13:49	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		01/02/18 13:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 13:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 13:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 13:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 13:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 13:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 13:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 13:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 13:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 13:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 13:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:49	75-35-4	
cis-1,2-Dichloroethene	**34.7**	ug/L	1.0	1		01/02/18 13:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 13:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 13:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 13:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 406	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 421	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 427	ND	ug/L	1.0	1		01/02/18 13:49		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-2 **Lab ID: 2067983005** Collected: 12/27/17 10:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 508	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 528	ND	ug/L	1.0	1		01/02/18 13:49		
Halomar	ND	ug/L	1.0	1		01/02/18 13:49		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 13:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 13:49		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 13:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 13:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 13:49	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 13:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 13:49	79-34-5	
Tetrachloroethene	**14.8**	ug/L	1.0	1		01/02/18 13:49	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 13:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 13:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	79-00-5	
Trichloroethene	**2.2**	ug/L	1.0	1		01/02/18 13:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 13:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 13:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 13:49	76-13-1	
Vinyl chloride	**2.6**	ug/L	1.0	1		01/02/18 13:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 13:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 13:49	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/02/18 13:49	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		01/02/18 13:49	460-00-4	
Dibromofluoromethane (S)	111	%.	72-126	1		01/02/18 13:49	1868-53-7	

Sample: MW-3A-3 **Lab ID: 2067983006** Collected: 12/27/17 11:58 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.6**	ug/L	4.0	1		01/02/18 14:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 14:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 14:07	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 14:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 14:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 14:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 14:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 14:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 14:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 14:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 14:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 14:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 14:07	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-3 **Lab ID: 2067983006** Collected: 12/27/17 11:58 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/02/18 14:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 14:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 14:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 14:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 14:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 14:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 406	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 421	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 427	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 428	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 508	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 528	ND	ug/L	1.0	1		01/02/18 14:07		
Halomar	ND	ug/L	1.0	1		01/02/18 14:07		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 14:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 14:07		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 14:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 14:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 14:07	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 14:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 14:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 14:07	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 14:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 14:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 14:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 14:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 14:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 14:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 14:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 14:07	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/02/18 14:07	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/02/18 14:07	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/02/18 14:07	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: EB-20171228 **Lab ID: 2067983007** Collected: 12/28/17 07:43 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 14:24	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 14:24	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 14:24	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 14:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 14:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 14:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 14:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 14:24	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 14:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 14:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 14:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 14:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 14:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 14:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 14:24	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 14:24	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 14:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:24	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 14:24	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 14:24	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 406	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 421	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 427	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 428	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 508	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 528	ND	ug/L	1.0	1		01/02/18 14:24		
Halomar	ND	ug/L	1.0	1		01/02/18 14:24		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 14:24	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 14:24		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 14:24	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 14:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 14:24	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 14:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 14:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 14:24	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 14:24	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 14:24		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: EB-20171228 **Lab ID: 2067983007** Collected: 12/28/17 07:43 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 14:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 14:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 14:24	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 14:24	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 14:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 14:24	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/02/18 14:24	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/02/18 14:24	460-00-4	
Dibromofluoromethane (S)	112	%.	72-126	1		01/02/18 14:24	1868-53-7	

Sample: FB-20171228 **Lab ID: 2067983008** Collected: 12/28/17 08:18 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 14:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 14:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 14:42	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 14:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 14:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 14:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 14:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 14:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 14:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 14:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 14:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 14:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 14:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 14:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 14:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 14:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 14:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 14:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 14:42	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 406	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 421	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 427	ND	ug/L	1.0	1		01/02/18 14:42		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FB-20171228 **Lab ID: 2067983008** Collected: 12/28/17 08:18 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 508	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 528	ND	ug/L	1.0	1		01/02/18 14:42		
Halomar	ND	ug/L	1.0	1		01/02/18 14:42		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 14:42	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 14:42		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 14:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 14:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 14:42	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 14:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 14:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 14:42	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 14:42	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 14:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 14:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 14:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 14:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 14:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 14:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 14:42	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/02/18 14:42	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/02/18 14:42	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/02/18 14:42	1868-53-7	

Sample: FMW-4-20 **Lab ID: 2067983009** Collected: 12/28/17 11:34 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 15:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 15:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 15:00	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 15:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 15:00	75-27-4	
Bromoform	**1.2**	ug/L	1.0	1		01/02/18 15:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 15:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 15:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 15:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 15:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 15:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 15:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 15:00	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FMW-4-20 **Lab ID: 2067983009** Collected: 12/28/17 11:34 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/02/18 15:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 15:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 15:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 15:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 15:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 15:00	100-41-4	
Haloether 229	**14.3**	ug/L	1.0	1		01/02/18 15:00		
Haloether 406	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 421	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 427	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 428	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 508	**6.3**	ug/L	1.0	1		01/02/18 15:00		
Haloether 528	ND	ug/L	1.0	1		01/02/18 15:00		
Halomar	ND	ug/L	1.0	1		01/02/18 15:00		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 15:00	591-78-6	
Isoflurane	**162**	ug/L	1.0	1		01/02/18 15:00		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 15:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 15:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 15:00	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 15:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 15:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 15:00	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 15:00	108-88-3	
Total Haloether	**182**	ug/L	1.0	1		01/02/18 15:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 15:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 15:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 15:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 15:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 15:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 15:00	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		01/02/18 15:00	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/02/18 15:00	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		01/02/18 15:00	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FMW-4-90 **Lab ID: 2067983010** Collected: 12/28/17 13:04 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 15:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 15:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 15:18	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 15:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 15:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 15:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 15:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 15:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 15:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 15:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 15:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 15:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 15:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 15:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 15:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 15:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 15:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 15:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 15:18	100-41-4	
Haloether 229	**25.3**	ug/L	1.0	1		01/02/18 15:18		
Haloether 406	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 421	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 427	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 428	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 508	**15.4**	ug/L	1.0	1		01/02/18 15:18		
Haloether 528	ND	ug/L	1.0	1		01/02/18 15:18		
Halomar	ND	ug/L	1.0	1		01/02/18 15:18		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 15:18	591-78-6	
Isoflurane	**198**	ug/L	1.0	1		01/02/18 15:18		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 15:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 15:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 15:18	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 15:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 15:18	79-34-5	
Tetrachloroethene	**1.0**	ug/L	1.0	1		01/02/18 15:18	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 15:18	108-88-3	
Total Haloether	**238**	ug/L	1.0	1		01/02/18 15:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FMW-4-90 **Lab ID: 2067983010** Collected: 12/28/17 13:04 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 15:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 15:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 15:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 15:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 15:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 15:18	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/02/18 15:18	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/02/18 15:18	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/02/18 15:18	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067983

QC Batch: 98159 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2067983001, 2067983002, 2067983003, 2067983004, 2067983005, 2067983006, 2067983007, 2067983008, 2067983009, 2067983010

METHOD BLANK: 422534 | Matrix: Water
Associated Lab Samples: 2067983001, 2067983002, 2067983003, 2067983004, 2067983005, 2067983006, 2067983007, 2067983008, 2067983009, 2067983010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/02/18 10:53	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/02/18 10:53	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/02/18 10:53	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	01/02/18 10:53	
1,1-Dichloroethane	ug/L	ND	1.0	01/02/18 10:53	
1,1-Dichloroethene	ug/L	ND	1.0	01/02/18 10:53	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/02/18 10:53	
1,2-Dichloroethane	ug/L	ND	1.0	01/02/18 10:53	
1,2-Dichloropropane	ug/L	ND	1.0	01/02/18 10:53	
2-Butanone (MEK)	ug/L	ND	2.0	01/02/18 10:53	
2-Hexanone	ug/L	ND	2.0	01/02/18 10:53	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	01/02/18 10:53	
Acetone	ug/L	ND	4.0	01/02/18 10:53	
Acrolein	ug/L	ND	8.0	01/02/18 10:53	
Acrylonitrile	ug/L	ND	4.0	01/02/18 10:53	
Benzene	ug/L	ND	1.0	01/02/18 10:53	
Bromodichloromethane	ug/L	ND	1.0	01/02/18 10:53	
Bromoform	ug/L	ND	1.0	01/02/18 10:53	
Bromomethane	ug/L	ND	1.0	01/02/18 10:53	
Carbon disulfide	ug/L	ND	1.0	01/02/18 10:53	
Carbon tetrachloride	ug/L	ND	1.0	01/02/18 10:53	
Chlorobenzene	ug/L	ND	1.0	01/02/18 10:53	
Chloroethane	ug/L	ND	1.0	01/02/18 10:53	
Chloroform	ug/L	ND	1.0	01/02/18 10:53	
Chloromethane	ug/L	ND	1.0	01/02/18 10:53	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/02/18 10:53	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/02/18 10:53	
Dibromochloromethane	ug/L	ND	1.0	01/02/18 10:53	
Dibromomethane	ug/L	ND	1.0	01/02/18 10:53	
Enflurane	ug/L	ND	1.0	01/02/18 10:53	
Ethylbenzene	ug/L	ND	1.0	01/02/18 10:53	
Haloether 229	ug/L	ND	1.0	01/02/18 10:53	
Haloether 406	ug/L	ND	1.0	01/02/18 10:53	
Haloether 421	ug/L	ND	1.0	01/02/18 10:53	
Haloether 427	ug/L	ND	1.0	01/02/18 10:53	
Haloether 428	ug/L	ND	1.0	01/02/18 10:53	
Haloether 508	ug/L	ND	1.0	01/02/18 10:53	
Haloether 528	ug/L	ND	1.0	01/02/18 10:53	
Halomar	ug/L	ND	1.0	01/02/18 10:53	
Isoflurane	ug/L	ND	1.0	01/02/18 10:53	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067983

METHOD BLANK: 422534 Matrix: Water

Associated Lab Samples: 2067983001, 2067983002, 2067983003, 2067983004, 2067983005, 2067983006, 2067983007, 2067983008, 2067983009, 2067983010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	01/02/18 10:53	
Methoxyflurane	ug/L	ND	1.0	01/02/18 10:53	
Methylene Chloride	ug/L	ND	5.0	01/02/18 10:53	
o-Xylene	ug/L	ND	1.0	01/02/18 10:53	
Styrene	ug/L	ND	1.0	01/02/18 10:53	
Tetrachloroethene	ug/L	ND	1.0	01/02/18 10:53	
Toluene	ug/L	ND	1.0	01/02/18 10:53	
Total Haloether	ug/L	ND	1.0	01/02/18 10:53	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/02/18 10:53	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/02/18 10:53	
Trichloroethene	ug/L	ND	1.0	01/02/18 10:53	
Trichlorofluoromethane	ug/L	ND	1.0	01/02/18 10:53	
Vinyl chloride	ug/L	ND	1.0	01/02/18 10:53	
4-Bromofluorobenzene (S)	%.	102	68-124	01/02/18 10:53	
Dibromofluoromethane (S)	%.	102	72-126	01/02/18 10:53	
Toluene-d8 (S)	%.	102	79-119	01/02/18 10:53	

LABORATORY CONTROL SAMPLE: 422535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.1	112	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	45.0	90	15-179	
1,1,2-Trichloroethane	ug/L	50	50.2	100	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	47.8	96	38-121	
1,1-Dichloroethane	ug/L	50	53.9	108	63-129	
1,1-Dichloroethene	ug/L	50	45.7	91	51-139	
1,2,3-Trichloropropane	ug/L	50	49.5	99	13-187	
1,2-Dichloroethane	ug/L	50	53.0	106	57-148	
1,2-Dichloropropane	ug/L	50	54.8	110	66-128	
2-Butanone (MEK)	ug/L	50	58.3	117	32-183	
2-Hexanone	ug/L	50	45.7	91	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	44.9	90	26-171	
Acetone	ug/L	50	65.9	132	22-165	
Acrolein	ug/L	50	46.2	92	10-131	
Acrylonitrile	ug/L	50	50.4	101	18-149	
Benzene	ug/L	50	51.7	103	62-131	
Bromodichloromethane	ug/L	50	56.9	114	69-132	
Bromoform	ug/L	50	51.5	103	35-166	
Bromomethane	ug/L	50	51.1	102	34-158	
Carbon disulfide	ug/L	50	44.1	88	31-128	
Carbon tetrachloride	ug/L	50	56.9	114	54-144	
Chlorobenzene	ug/L	50	54.4	109	70-127	
Chloroethane	ug/L	50	52.5	105	17-195	

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067983

LABORATORY CONTROL SAMPLE: 422535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	50	53.1	106	73-134	
Chloromethane	ug/L	50	48.3	97	17-153	
cis-1,2-Dichloroethene	ug/L	50	52.1	104	68-129	
cis-1,3-Dichloropropene	ug/L	50	56.6	113	72-138	
Dibromochloromethane	ug/L	50	50.1	100	49-146	
Dibromomethane	ug/L	50	52.7	105	56-145	
Enflurane	ug/L	50	48.5	97	56-135	
Ethylbenzene	ug/L	50	52.5	105	66-126	
Haloether 229	ug/L	50	34.2	68	62-123	
Haloether 406	ug/L	50	44.2	88	62-134	
Haloether 421	ug/L	50	41.2	82	70-128	
Haloether 427	ug/L	50	46.8	94	69-153	
Haloether 428	ug/L	50	45.1	90	70-134	
Haloether 508	ug/L	50	46.7	93	52-139	
Haloether 528	ug/L	50	38.9	78	48-157	
Halomar	ug/L	50	46.1	92	62-128	
Isoflurane	ug/L	50	45.7	91	61-132	
m&p-Xylene	ug/L	100	103	103	65-129	
Methoxyflurane	ug/L	50	42.9	86	72-124	
Methylene Chloride	ug/L	50	50.3	101	46-168	
o-Xylene	ug/L	50	51.0	102	65-124	
Styrene	ug/L	50	53.2	106	72-133	
Tetrachloroethene	ug/L	50	57.3	115	46-157	
Toluene	ug/L	50	51.9	104	69-126	
Total Haloether	ug/L		480			
trans-1,2-Dichloroethene	ug/L	50	52.3	105	60-129	
trans-1,3-Dichloropropene	ug/L	50	54.7	109	59-149	
Trichloroethene	ug/L	50	52.8	106	67-132	
Trichlorofluoromethane	ug/L	50	53.2	106	39-171	
Vinyl chloride	ug/L	50	47.4	95	27-149	
4-Bromofluorobenzene (S)	%.			96	68-124	
Dibromofluoromethane (S)	%.			102	72-126	
Toluene-d8 (S)	%.			101	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 422536 422537

Parameter	Units	2067983004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	59.8	59.0	120	118	54-137	1	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	47.0	47.7	94	95	15-187	1	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	49.1	49.4	98	99	59-148	1	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	47.7	53.5	95	107	40-117	12	20	
1,1-Dichloroethane	ug/L	ND	50	50	56.8	55.5	114	111	59-133	2	20	
1,1-Dichloroethene	ug/L	ND	50	50	51.3	54.9	103	110	44-146	7	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	51.1	50.8	102	102	14-199	1	20	

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REPORT OF LABORATORY ANALYSIS

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(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067983

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 422536 422537

Parameter	Units	2067983004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	51.5	51.1	103	102	56-154	1	20	
1,2-Dichloropropane	ug/L	ND	50	50	53.9	53.3	108	107	62-135	1	20	
2-Butanone (MEK)	ug/L	ND	50	50	46.2	45.7	92	91	20-205	1	20	
2-Hexanone	ug/L	ND	50	50	44.3	45.4	89	91	25-189	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	46.6	47.9	93	96	23-184	3	20	
Acetone	ug/L	ND	50	50	47.2	50.4	94	101	11-217	7	20	
Acrolein	ug/L	ND	50	50	47.1	48.1	94	96	10-142	2	20	
Acrylonitrile	ug/L	ND	50	50	50.0	50.7	100	101	20-164	1	20	
Benzene	ug/L	ND	50	50	52.8	52.5	106	105	52-141	1	20	
Bromodichloromethane	ug/L	ND	50	50	56.2	55.9	112	112	70-134	1	20	
Bromoform	ug/L	ND	50	50	50.7	52.8	101	106	37-171	4	20	
Bromomethane	ug/L	ND	50	50	60.3	55.3	121	111	34-155	9	20	
Carbon disulfide	ug/L	ND	50	50	51.4	53.0	103	106	28-130	3	20	
Carbon tetrachloride	ug/L	ND	50	50	60.2	60.8	120	122	48-146	1	20	
Chlorobenzene	ug/L	ND	50	50	55.0	55.8	110	112	67-129	2	20	
Chloroethane	ug/L	ND	50	50	56.5	52.1	113	104	12-192	8	20	
Chloroform	ug/L	ND	50	50	53.7	53.3	107	107	66-143	1	20	
Chloromethane	ug/L	ND	50	50	52.3	50.2	105	100	14-155	4	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	55.4	53.7	110	106	56-141	3	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.7	54.7	109	109	70-139	0	20	
Dibromochloromethane	ug/L	ND	50	50	50.1	51.0	100	102	50-150	2	20	
Dibromomethane	ug/L	ND	50	50	51.8	52.4	104	105	58-153	1	20	
Enflurane	ug/L	ND	50	50	53.8	53.8	108	108	63-126	0	20	
Ethylbenzene	ug/L	ND	50	50	54.9	56.4	110	113	57-135	3	20	
Haloether 229	ug/L	ND	50	50	41.5	38.2	83	76	56-127	8	20	
Haloether 406	ug/L	ND	50	50	49.5	49.6	99	99	68-128	0	20	
Haloether 421	ug/L	ND	50	50	43.5	42.8	87	86	74-120	2	20	
Haloether 427	ug/L	ND	50	50	50.4	52.2	101	104	78-120	4	20	
Haloether 428	ug/L	ND	50	50	47.8	51.5	96	103	74-125	8	20	
Haloether 508	ug/L	ND	50	50	53.5	51.9	107	104	28-156	3	20	
Haloether 528	ug/L	ND	50	50	40.2	39.9	80	80	45-142	1	20	
Halomar	ug/L	ND	50	50	50.2	48.9	100	98	67-123	3	20	
Isoflurane	ug/L	ND	50	50	52.2	51.7	104	103	45-140	1	20	
m&p-Xylene	ug/L	ND	100	100	106	109	106	109	56-136	2	20	
Methoxyflurane	ug/L	ND	50	50	43.8	43.2	88	86	75-119	1	20	
Methylene Chloride	ug/L	ND	50	50	52.4	50.4	105	101	45-166	4	20	
o-Xylene	ug/L	ND	50	50	52.7	53.4	105	107	57-133	1	20	
Styrene	ug/L	ND	50	50	53.0	54.6	106	109	58-144	3	20	
Tetrachloroethene	ug/L	2.5	50	50	65.4	68.9	126	133	48-143	5	20	
Toluene	ug/L	ND	50	50	52.1	52.1	104	104	59-136	0	20	
Total Haloether	ug/L	ND			526	524				1		
trans-1,2-Dichloroethene	ug/L	ND	50	50	55.4	56.3	111	113	57-132	2	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	52.6	53.2	105	106	59-154	1	20	
Trichloroethene	ug/L	ND	50	50	55.6	54.5	111	109	58-140	2	20	
Trichlorofluoromethane	ug/L	ND	50	50	57.7	55.7	115	111	24-175	4	20	

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(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2067983

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 422536 422537

Parameter	Units	2067983004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	ND	50	50	54.0	52.5	108	105	21-150	3	20	
4-Bromofluorobenzene (S)	%.						98	97	68-124			
Dibromofluoromethane (S)	%.						102	101	72-126			
Toluene-d8 (S)	%.						100	101	79-119			

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2067983

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2067983

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2067983001	**TB-20171227**	EPA 5030B/8260	98159		
2067983002	**EB-20171227**	EPA 5030B/8260	98159		
2067983003	**FB-20171227**	EPA 5030B/8260	98159		
2067983004	**MW-3A-1BR**	EPA 5030B/8260	98159		
2067983005	**MW-3A-2**	EPA 5030B/8260	98159		
2067983006	**MW-3A-3**	EPA 5030B/8260	98159		
2067983007	**EB-20171228**	EPA 5030B/8260	98159		
2067983008	**FB-20171228**	EPA 5030B/8260	98159		
2067983009	**FMW-4-20**	EPA 5030B/8260	98159		
2067983010	**FMW-4-90**	EPA 5030B/8260	98159		

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CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOCU

WO# : 2067983

2067983

of

1965986

Section A Required Client Information:

Company: Arcadis
Address: #48 City View Plaza, Suite 401
Rd 165 Km 1.2 Guaynabo P.R. 00968
Email To:
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Fiers 25 APR 2017 (PO# 0000191.0005 1102A
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Craig.mccollum@pacelabs.com
Pace Profile #: 1037 L 12

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOC 8260 Trip blank	VOC 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-20171227	WT	G			12/27/17	LAB		2				2					X			
2	EB-20171227	WT	G			12/27/17	0815		3				3						X		
3	FB-20171227	WT	G			12/27/17	0907		3				3						X		
4	MW-3A-1BR	WT	G			12/27/17	0957		3				3						X		
5	MW-3A-2	WT	G			12/27/17	1057		3				3						X		
6	MW-3A-3	WT	G			12/27/17	1158		3				3						X		
7	EB-20171228	WT	G			12/28/17	0743		3				3						X		
8	FB-20171228	WT	G			12/28/17	0818		3				3						X		
9	FMW-4-20	WT	G			12/28/17	1134		3				3						X		
10	FMW-4-90	WT	G			12/28/17	1304		3				3						X		
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colón / Arcadis	12/28/17	1531	[signature] / Pace	12-28-17	15:31				
	Fed Ex 12/29/17	0800		Fed Ex [signature] Pace	12/29/17	0820	0.6	y	y	y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colón

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12/28/17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

WO#: 2067983

PM: CJM Due Date: 01/15/18

CLIENT: 20-CHEV-ARC

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon R

Proj

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12-29-17

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☑No	☐N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☑N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☑No	☐N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
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(504)469-0333

January 11, 2018

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2068274

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on January 05, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2068274

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2068274

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2068274001	**TB-20180103**	Water	01/03/18 00:00	01/05/18 08:05
2068274002	**EB-20180103**	Water	01/03/18 08:10	01/05/18 08:05
2068274003	**FB-20180103**	Water	01/03/18 10:52	01/05/18 08:05
2068274004	**RW-2**	Water	01/03/18 10:58	01/05/18 08:05
2068274005	**RW-4**	Water	01/03/18 11:26	01/05/18 08:05
2068274006	**EB-20180104**	Water	01/04/18 07:50	01/05/18 08:05
2068274007	**FB-20180104**	Water	01/04/18 09:24	01/05/18 08:05
2068274008	**MW-2C-1BR**	Water	01/04/18 10:10	01/05/18 08:05
2068274009	**MW-2C-4**	Water	01/04/18 10:38	01/05/18 08:05
2068274010	**MW-2C-2**	Water	01/04/18 11:33	01/05/18 08:05
2068274011	**MW-2C-5**	Water	01/04/18 12:19	01/05/18 08:05

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2068274

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2068274001	**TB-20180103**	EPA 5030B/8260	GEM	56	PASI-N
2068274002	**EB-20180103**	EPA 5030B/8260	GEM	56	PASI-N
2068274003	**FB-20180103**	EPA 5030B/8260	GEM	56	PASI-N
2068274004	**RW-2**	EPA 5030B/8260	GEM	56	PASI-N
2068274005	**RW-4**	EPA 5030B/8260	GEM	56	PASI-N
2068274006	**EB-20180104**	EPA 5030B/8260	GEM	56	PASI-N
2068274007	**FB-20180104**	EPA 5030B/8260	GEM	56	PASI-N
2068274008	**MW-2C-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2068274009	**MW-2C-4**	EPA 5030B/8260	GEM	56	PASI-N
2068274010	**MW-2C-2**	EPA 5030B/8260	GEM	56	PASI-N
2068274011	**MW-2C-5**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2068274

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: January 11, 2018

General Information:
11 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: TB-20180103 **Lab ID: 2068274001** Collected: 01/03/18 00:00 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.3**	ug/L	4.0	1		01/08/18 11:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 11:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 11:57	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 11:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 11:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 11:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 11:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 11:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 11:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 11:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 11:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 11:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 11:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 11:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 11:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 11:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 11:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 11:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 11:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 406	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 421	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 427	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 428	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 508	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 528	ND	ug/L	1.0	1		01/08/18 11:57		
Halomar	ND	ug/L	1.0	1		01/08/18 11:57		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 11:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 11:57		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 11:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 11:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 11:57	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 11:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 11:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 11:57	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 11:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 11:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: TB-20180103 **Lab ID: 2068274001** Collected: 01/03/18 00:00 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 11:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 11:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 11:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 11:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 11:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 11:57	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 11:57	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		01/08/18 11:57	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/08/18 11:57	1868-53-7	

Sample: EB-20180103 **Lab ID: 2068274002** Collected: 01/03/18 08:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 15:47	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 15:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 15:47	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 15:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 15:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 15:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 15:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 15:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 15:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 15:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 15:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 15:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 15:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 15:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 15:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 15:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 15:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:47	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 15:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 15:47	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 406	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 421	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 427	ND	ug/L	1.0	1		01/08/18 15:47		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: EB-20180103 **Lab ID: 2068274002** Collected: 01/03/18 08:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 508	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 528	ND	ug/L	1.0	1		01/08/18 15:47		
Halomar	ND	ug/L	1.0	1		01/08/18 15:47		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 15:47	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 15:47		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 15:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 15:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 15:47	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 15:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 15:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 15:47	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 15:47	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 15:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 15:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 15:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 15:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 15:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 15:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 15:47	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 15:47	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		01/08/18 15:47	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	1		01/08/18 15:47	1868-53-7	

Sample: FB-20180103 **Lab ID: 2068274003** Collected: 01/03/18 10:52 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.7**	ug/L	4.0	1		01/08/18 16:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 16:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 16:05	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 16:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 16:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 16:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 16:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 16:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 16:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 16:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 16:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 16:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 16:05	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: FB-20180103 **Lab ID: 2068274003** Collected: 01/03/18 10:52 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/08/18 16:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 16:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 16:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 16:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 16:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 16:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 406	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 421	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 427	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 428	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 508	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 528	ND	ug/L	1.0	1		01/08/18 16:05		
Halomar	ND	ug/L	1.0	1		01/08/18 16:05		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 16:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 16:05		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 16:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 16:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 16:05	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 16:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 16:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 16:05	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 16:05	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 16:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 16:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 16:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 16:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 16:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 16:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 16:05	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		01/08/18 16:05	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/08/18 16:05	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		01/08/18 16:05	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: RW-2 **Lab ID: 2068274004** Collected: 01/03/18 10:58 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 12:50	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 12:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 12:50	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 12:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 12:50	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		01/08/18 12:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 12:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 12:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 12:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 12:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 12:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 12:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 12:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 12:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 12:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 12:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 12:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 12:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 12:50	10061-02-6	
Enflurane	**1.5**	ug/L	1.0	1		01/08/18 12:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 12:50	100-41-4	
Haloether 229	**12.7**	ug/L	1.0	1		01/08/18 12:50		
Haloether 406	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 421	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 427	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 428	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 508	**33.9**	ug/L	1.0	1		01/08/18 12:50		
Haloether 528	**1.2**	ug/L	1.0	1		01/08/18 12:50		
Halomar	ND	ug/L	1.0	1		01/08/18 12:50		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 12:50	591-78-6	
Isoflurane	**65.2**	ug/L	1.0	1		01/08/18 12:50		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 12:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 12:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 12:50	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 12:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 12:50	79-34-5	
Tetrachloroethene	**4.4**	ug/L	1.0	1		01/08/18 12:50	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 12:50	108-88-3	
Total Haloether	**115**	ug/L	1.0	1		01/08/18 12:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: RW-2 **Lab ID: 2068274004** Collected: 01/03/18 10:58 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 12:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 12:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 12:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 12:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 12:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 12:50	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/08/18 12:50	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/08/18 12:50	460-00-4	
Dibromofluoromethane (S)	113	%.	72-126	1		01/08/18 12:50	1868-53-7	

Sample: RW-4 **Lab ID: 2068274005** Collected: 01/03/18 11:26 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 13:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 13:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 13:43	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 13:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 13:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 13:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 13:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 13:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 13:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 13:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 13:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 13:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 13:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 13:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 13:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 13:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 13:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 13:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 13:43	100-41-4	
Haloether 229	**2.9**	ug/L	1.0	1		01/08/18 13:43		
Haloether 406	ND	ug/L	1.0	1		01/08/18 13:43		
Haloether 421	ND	ug/L	1.0	1		01/08/18 13:43		
Haloether 427	ND	ug/L	1.0	1		01/08/18 13:43		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: RW-4 **Lab ID: 2068274005** Collected: 01/03/18 11:26 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/08/18 13:43		
Haloether 508	**31.9**	ug/L	1.0	1		01/08/18 13:43		
Haloether 528	ND	ug/L	1.0	1		01/08/18 13:43		
Halomar	ND	ug/L	1.0	1		01/08/18 13:43		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 13:43	591-78-6	
Isoflurane	**21.5**	ug/L	1.0	1		01/08/18 13:43		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 13:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 13:43	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 13:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 13:43	79-34-5	
Tetrachloroethene	**3.2**	ug/L	1.0	1		01/08/18 13:43	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 13:43	108-88-3	
Total Haloether	**56.3**	ug/L	1.0	1		01/08/18 13:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 13:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 13:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 13:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 13:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 13:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 13:43	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/08/18 13:43	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		01/08/18 13:43	460-00-4	
Dibromofluoromethane (S)	115	%.	72-126	1		01/08/18 13:43	1868-53-7	

Sample: EB-20180104 **Lab ID: 2068274006** Collected: 01/04/18 07:50 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**12.6**	ug/L	4.0	1		01/08/18 14:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 14:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 14:01	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 14:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 14:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 14:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 14:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 14:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 14:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 14:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 14:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 14:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 14:01	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: EB-20180104 **Lab ID: 2068274006** Collected: 01/04/18 07:50 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/08/18 14:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 14:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 14:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 14:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 14:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 14:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 406	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 421	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 427	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 428	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 508	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 528	ND	ug/L	1.0	1		01/08/18 14:01		
Halomar	ND	ug/L	1.0	1		01/08/18 14:01		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 14:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 14:01		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 14:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 14:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 14:01	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 14:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 14:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 14:01	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 14:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 14:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 14:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 14:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 14:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 14:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 14:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 14:01	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 14:01	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		01/08/18 14:01	460-00-4	
Dibromofluoromethane (S)	120	%.	72-126	1		01/08/18 14:01	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: FB-20180104 **Lab ID: 2068274007** Collected: 01/04/18 09:24 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**12.8**	ug/L	4.0	1		01/08/18 14:19	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 14:19	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 14:19	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 14:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 14:19	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		01/08/18 14:19	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 14:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 14:19	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 14:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 14:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 14:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 14:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 14:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 14:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 14:19	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 14:19	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 14:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:19	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 14:19	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 14:19	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 406	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 421	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 427	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 428	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 508	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 528	ND	ug/L	1.0	1		01/08/18 14:19		
Halomar	ND	ug/L	1.0	1		01/08/18 14:19		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 14:19	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 14:19		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 14:19	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 14:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 14:19	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 14:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 14:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 14:19	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 14:19	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 14:19		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: FB-20180104 **Lab ID: 2068274007** Collected: 01/04/18 09:24 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 14:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 14:19	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 14:19	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 14:19	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 14:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 14:19	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/08/18 14:19	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/08/18 14:19	460-00-4	
Dibromofluoromethane (S)	116	%.	72-126	1		01/08/18 14:19	1868-53-7	

Sample: MW-2C-1BR **Lab ID: 2068274008** Collected: 01/04/18 10:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 11:39	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 11:39	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 11:39	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 11:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 11:39	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 11:39	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 11:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 11:39	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 11:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 11:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 11:39	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 11:39	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 11:39	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 11:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 11:39	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 11:39	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 11:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:39	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 11:39	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 11:39	100-41-4	
Haloether 229	**2.0**	ug/L	1.0	1		01/08/18 11:39		
Haloether 406	ND	ug/L	1.0	1		01/08/18 11:39		
Haloether 421	ND	ug/L	1.0	1		01/08/18 11:39		
Haloether 427	ND	ug/L	1.0	1		01/08/18 11:39		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-1BR **Lab ID: 2068274008** Collected: 01/04/18 10:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/08/18 11:39		
Haloether 508	**6.4**	ug/L	1.0	1		01/08/18 11:39		
Haloether 528	ND	ug/L	1.0	1		01/08/18 11:39		
Halomar	ND	ug/L	1.0	1		01/08/18 11:39		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 11:39	591-78-6	
Isoflurane	**15.6**	ug/L	1.0	1		01/08/18 11:39		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 11:39	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 11:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 11:39	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 11:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 11:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 11:39	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 11:39	108-88-3	
Total Haloether	**24.0**	ug/L	1.0	1		01/08/18 11:39		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 11:39	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 11:39	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 11:39	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 11:39	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 11:39	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 11:39	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 11:39	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/08/18 11:39	460-00-4	
Dibromofluoromethane (S)	112	%.	72-126	1		01/08/18 11:39	1868-53-7	

Sample: MW-2C-4 **Lab ID: 2068274009** Collected: 01/04/18 10:38 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 14:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 14:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 14:54	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 14:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 14:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 14:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 14:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 14:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 14:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 14:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 14:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 14:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 14:54	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-4 **Lab ID: 2068274009** Collected: 01/04/18 10:38 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/08/18 14:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 14:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 14:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 14:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 14:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 14:54	100-41-4	
Haloether 229	**3.5**	ug/L	1.0	1		01/08/18 14:54		
Haloether 406	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 421	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 427	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 428	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 508	**6.2**	ug/L	1.0	1		01/08/18 14:54		
Haloether 528	ND	ug/L	1.0	1		01/08/18 14:54		
Halomar	ND	ug/L	1.0	1		01/08/18 14:54		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 14:54	591-78-6	
Isoflurane	**18.1**	ug/L	1.0	1		01/08/18 14:54		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 14:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 14:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 14:54	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 14:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 14:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 14:54	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 14:54	108-88-3	
Total Haloether	**27.8**	ug/L	1.0	1		01/08/18 14:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 14:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 14:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 14:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 14:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 14:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 14:54	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/08/18 14:54	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		01/08/18 14:54	460-00-4	
Dibromofluoromethane (S)	115	%.	72-126	1		01/08/18 14:54	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-2 **Lab ID: 2068274010** Collected: 01/04/18 11:33 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 15:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 15:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 15:12	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 15:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 15:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 15:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 15:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 15:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 15:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 15:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 15:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 15:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 15:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 15:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 15:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 15:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 15:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:12	10061-02-6	
Enflurane	**1.7**	ug/L	1.0	1		01/08/18 15:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 15:12	100-41-4	
Haloether 229	**42.8**	ug/L	1.0	1		01/08/18 15:12		
Haloether 406	**1.7**	ug/L	1.0	1		01/08/18 15:12		
Haloether 421	ND	ug/L	1.0	1		01/08/18 15:12		
Haloether 427	ND	ug/L	1.0	1		01/08/18 15:12		
Haloether 428	ND	ug/L	1.0	1		01/08/18 15:12		
Haloether 508	**49.6**	ug/L	1.0	1		01/08/18 15:12		
Haloether 528	ND	ug/L	1.0	1		01/08/18 15:12		
Halomar	ND	ug/L	1.0	1		01/08/18 15:12		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 15:12	591-78-6	
Isoflurane	**165**	ug/L	5.0	5		01/08/18 16:24		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 15:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 15:12	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 15:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 15:12	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		01/08/18 15:12	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 15:12	108-88-3	
Total Haloether	**261**	ug/L	5.0	5		01/08/18 16:24		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-2 **Lab ID: 2068274010** Collected: 01/04/18 11:33 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 15:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 15:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 15:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 15:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 15:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 15:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/08/18 15:12	2037-26-5	
Toluene-d8 (S)	98	%.	79-119	5		01/08/18 16:24	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	5		01/08/18 16:24	460-00-4	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/08/18 15:12	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	5		01/08/18 16:24	1868-53-7	
Dibromofluoromethane (S)	115	%.	72-126	1		01/08/18 15:12	1868-53-7	

Sample: MW-2C-5 **Lab ID: 2068274011** Collected: 01/04/18 12:19 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 16:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 16:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 16:42	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 16:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 16:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 16:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 16:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 16:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 16:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 16:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 16:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 16:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 16:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 16:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 16:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 16:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 16:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 16:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 16:42	100-41-4	
Haloether 229	**5.3**	ug/L	1.0	1		01/08/18 16:42		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-5 **Lab ID: 2068274011** Collected: 01/04/18 12:19 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 406	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 421	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 427	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 428	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 508	**4.5**	ug/L	1.0	1		01/08/18 16:42		
Haloether 528	ND	ug/L	1.0	1		01/08/18 16:42		
Halomar	ND	ug/L	1.0	1		01/08/18 16:42		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 16:42	591-78-6	
Isoflurane	**25.5**	ug/L	1.0	1		01/08/18 16:42		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 16:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 16:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 16:42	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 16:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 16:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 16:42	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 16:42	108-88-3	
Total Haloether	**35.2**	ug/L	1.0	1		01/08/18 16:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 16:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 16:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 16:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 16:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 16:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 16:42	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/08/18 16:42	2037-26-5	
4-Bromofluorobenzene (S)	110	%.	68-124	1		01/08/18 16:42	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/08/18 16:42	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068274

QC Batch: 98583 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2068274001, 2068274002, 2068274003, 2068274004, 2068274005, 2068274006, 2068274007, 2068274008, 2068274009, 2068274010, 2068274011

METHOD BLANK: 424387 | Matrix: Water
Associated Lab Samples: 2068274001, 2068274002, 2068274003, 2068274004, 2068274005, 2068274006, 2068274007, 2068274008, 2068274009, 2068274010, 2068274011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/08/18 10:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/08/18 10:11	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/08/18 10:11	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	01/08/18 10:11	
1,1-Dichloroethane	ug/L	ND	1.0	01/08/18 10:11	
1,1-Dichloroethene	ug/L	ND	1.0	01/08/18 10:11	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/08/18 10:11	
1,2-Dichloroethane	ug/L	ND	1.0	01/08/18 10:11	
1,2-Dichloropropane	ug/L	ND	1.0	01/08/18 10:11	
2-Butanone (MEK)	ug/L	ND	2.0	01/08/18 10:11	
2-Hexanone	ug/L	ND	2.0	01/08/18 10:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	01/08/18 10:11	
Acetone	ug/L	ND	4.0	01/08/18 10:11	
Acrolein	ug/L	ND	8.0	01/08/18 10:11	
Acrylonitrile	ug/L	ND	4.0	01/08/18 10:11	
Benzene	ug/L	ND	1.0	01/08/18 10:11	
Bromodichloromethane	ug/L	ND	1.0	01/08/18 10:11	
Bromoform	ug/L	ND	1.0	01/08/18 10:11	
Bromomethane	ug/L	ND	1.0	01/08/18 10:11	
Carbon disulfide	ug/L	ND	1.0	01/08/18 10:11	
Carbon tetrachloride	ug/L	ND	1.0	01/08/18 10:11	
Chlorobenzene	ug/L	ND	1.0	01/08/18 10:11	
Chloroethane	ug/L	ND	1.0	01/08/18 10:11	
Chloroform	ug/L	ND	1.0	01/08/18 10:11	
Chloromethane	ug/L	ND	1.0	01/08/18 10:11	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/08/18 10:11	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/08/18 10:11	
Dibromochloromethane	ug/L	ND	1.0	01/08/18 10:11	
Dibromomethane	ug/L	ND	1.0	01/08/18 10:11	
Enflurane	ug/L	ND	1.0	01/08/18 10:11	
Ethylbenzene	ug/L	ND	1.0	01/08/18 10:11	
Haloether 229	ug/L	ND	1.0	01/08/18 10:11	
Haloether 406	ug/L	ND	1.0	01/08/18 10:11	
Haloether 421	ug/L	ND	1.0	01/08/18 10:11	
Haloether 427	ug/L	ND	1.0	01/08/18 10:11	
Haloether 428	ug/L	ND	1.0	01/08/18 10:11	
Haloether 508	ug/L	ND	1.0	01/08/18 10:11	
Haloether 528	ug/L	ND	1.0	01/08/18 10:11	
Halomar	ug/L	ND	1.0	01/08/18 10:11	
Isoflurane	ug/L	ND	1.0	01/08/18 10:11	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068274

METHOD BLANK: 424387 Matrix: Water

Associated Lab Samples: 2068274001, 2068274002, 2068274003, 2068274004, 2068274005, 2068274006, 2068274007, 2068274008, 2068274009, 2068274010, 2068274011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	01/08/18 10:11	
Methoxyflurane	ug/L	ND	1.0	01/08/18 10:11	
Methylene Chloride	ug/L	ND	5.0	01/08/18 10:11	
o-Xylene	ug/L	ND	1.0	01/08/18 10:11	
Styrene	ug/L	ND	1.0	01/08/18 10:11	
Tetrachloroethene	ug/L	ND	1.0	01/08/18 10:11	
Toluene	ug/L	ND	1.0	01/08/18 10:11	
Total Haloether	ug/L	ND	1.0	01/08/18 10:11	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/08/18 10:11	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/08/18 10:11	
Trichloroethene	ug/L	ND	1.0	01/08/18 10:11	
Trichlorofluoromethane	ug/L	ND	1.0	01/08/18 10:11	
Vinyl chloride	ug/L	ND	1.0	01/08/18 10:11	
4-Bromofluorobenzene (S)	%.	103	68-124	01/08/18 10:11	
Dibromofluoromethane (S)	%.	104	72-126	01/08/18 10:11	
Toluene-d8 (S)	%.	102	79-119	01/08/18 10:11	

LABORATORY CONTROL SAMPLE: 424388

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.1	110	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	46.8	94	15-179	
1,1,2-Trichloroethane	ug/L	50	50.3	101	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	40.3	81	38-121	
1,1-Dichloroethane	ug/L	50	52.0	104	63-129	
1,1-Dichloroethene	ug/L	50	39.6	79	51-139	
1,2,3-Trichloropropane	ug/L	50	51.5	103	13-187	
1,2-Dichloroethane	ug/L	50	53.5	107	57-148	
1,2-Dichloropropane	ug/L	50	51.7	103	66-128	
2-Butanone (MEK)	ug/L	50	47.9	96	32-183	
2-Hexanone	ug/L	50	43.1	86	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	46.8	94	26-171	
Acetone	ug/L	50	48.9	98	22-165	
Acrolein	ug/L	50	22.1	44	10-131	
Acrylonitrile	ug/L	50	52.2	104	18-149	
Benzene	ug/L	50	47.9	96	62-131	
Bromodichloromethane	ug/L	50	56.2	112	69-132	
Bromoform	ug/L	50	53.3	107	35-166	
Bromomethane	ug/L	50	58.6	117	34-158	
Carbon disulfide	ug/L	50	30.1	60	31-128	
Carbon tetrachloride	ug/L	50	53.3	107	54-144	
Chlorobenzene	ug/L	50	55.3	111	70-127	
Chloroethane	ug/L	50	52.2	104	17-195	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068274

LABORATORY CONTROL SAMPLE: 424388

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	50	52.8	106	73-134	
Chloromethane	ug/L	50	38.2	76	17-153	
cis-1,2-Dichloroethene	ug/L	50	50.7	101	68-129	
cis-1,3-Dichloropropene	ug/L	50	53.6	107	72-138	
Dibromochloromethane	ug/L	50	51.1	102	49-146	
Dibromomethane	ug/L	50	49.6	99	56-145	
Enflurane	ug/L	50	50.4	101	56-135	
Ethylbenzene	ug/L	50	51.9	104	66-126	
Haloether 229	ug/L	50	35.6	71	62-123	
Haloether 406	ug/L	50	44.8	90	62-134	
Haloether 421	ug/L	50	40.3	81	70-128	
Haloether 427	ug/L	50	47.0	94	69-153	
Haloether 428	ug/L	50	45.7	91	70-134	
Haloether 508	ug/L	50	46.1	92	52-139	
Haloether 528	ug/L	50	38.4	77	48-157	
Halomar	ug/L	50	45.2	90	62-128	
Isoflurane	ug/L	50	48.1	96	61-132	
m&p-Xylene	ug/L	100	105	105	65-129	
Methoxyflurane	ug/L	50	40.4	81	72-124	
Methylene Chloride	ug/L	50	47.3	95	46-168	
o-Xylene	ug/L	50	51.9	104	65-124	
Styrene	ug/L	50	54.0	108	72-133	
Tetrachloroethene	ug/L	50	59.8	120	46-157	
Toluene	ug/L	50	50.8	102	69-126	
Total Haloether	ug/L		482			
trans-1,2-Dichloroethene	ug/L	50	48.4	97	60-129	
trans-1,3-Dichloropropene	ug/L	50	52.8	106	59-149	
Trichloroethene	ug/L	50	51.6	103	67-132	
Trichlorofluoromethane	ug/L	50	53.3	107	39-171	
Vinyl chloride	ug/L	50	42.9	86	27-149	
4-Bromofluorobenzene (S)	%.			101	68-124	
Dibromofluoromethane (S)	%.			103	72-126	
Toluene-d8 (S)	%.			100	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 424389 424390

Parameter	Units	2068274008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	62.4	61.4	125	123	54-137	2	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	47.5	45.5	95	91	15-187	4	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	52.5	47.5	105	95	59-148	10	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	46.1	47.2	92	94	40-117	2	20	
1,1-Dichloroethane	ug/L	ND	50	50	57.4	55.2	115	110	59-133	4	20	
1,1-Dichloroethene	ug/L	ND	50	50	45.3	46.5	91	93	44-146	3	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	53.0	50.4	106	101	14-199	5	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068274

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 424389 424390

Parameter	Units	2068274008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	55.0	52.7	110	105	56-154	4	20	
1,2-Dichloropropane	ug/L	ND	50	50	54.4	50.9	109	102	62-135	7	20	
2-Butanone (MEK)	ug/L	ND	50	50	46.6	45.6	93	91	20-205	2	20	
2-Hexanone	ug/L	ND	50	50	47.5	43.7	95	87	25-189	8	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	50.2	45.9	100	92	23-184	9	20	
Acetone	ug/L	ND	50	50	47.3	47.7	89	90	11-217	1	20	
Acrolein	ug/L	ND	50	50	52.2	51.6	104	103	10-142	1	20	
Acrylonitrile	ug/L	ND	50	50	50.6	50.1	101	100	20-164	1	20	
Benzene	ug/L	ND	50	50	52.9	49.8	106	100	52-141	6	20	
Bromodichloromethane	ug/L	ND	50	50	57.6	55.1	115	110	70-134	4	20	
Bromoform	ug/L	ND	50	50	57.2	54.5	114	109	37-171	5	20	
Bromomethane	ug/L	ND	50	50	66.2	64.8	132	130	34-155	2	20	
Carbon disulfide	ug/L	ND	50	50	37.7	36.4	75	73	28-130	4	20	
Carbon tetrachloride	ug/L	ND	50	50	61.2	57.6	122	115	48-146	6	20	
Chlorobenzene	ug/L	ND	50	50	59.8	57.3	120	115	67-129	4	20	
Chloroethane	ug/L	ND	50	50	63.4	63.4	127	127	12-192	0	20	
Chloroform	ug/L	ND	50	50	56.3	55.6	113	111	66-143	1	20	
Chloromethane	ug/L	ND	50	50	42.2	41.0	84	82	14-155	3	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	55.7	54.0	111	108	56-141	3	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.7	52.5	109	105	70-139	4	20	
Dibromochloromethane	ug/L	ND	50	50	55.6	51.7	111	103	50-150	7	20	
Dibromomethane	ug/L	ND	50	50	53.5	50.9	107	102	58-153	5	20	
Enflurane	ug/L	ND	50	50	58.9	57.6	117	114	63-126	2	20	
Ethylbenzene	ug/L	ND	50	50	57.4	56.1	115	112	57-135	2	20	
Haloether 229	ug/L	2.0	50	50	47.7	50.1	91	96	56-127	5	20	
Haloether 406	ug/L	ND	50	50	51.7	52.3	103	105	68-128	1	20	
Haloether 421	ug/L	ND	50	50	44.9	41.9	90	84	74-120	7	20	
Haloether 427	ug/L	ND	50	50	55.1	53.1	110	106	78-120	4	20	
Haloether 428	ug/L	ND	50	50	50.8	50.2	102	100	74-125	1	20	
Haloether 508	ug/L	6.4	50	50	62.6	64.0	112	115	28-156	2	20	
Haloether 528	ug/L	ND	50	50	42.1	41.2	84	82	45-142	2	20	
Halomar	ug/L	ND	50	50	51.8	50.3	104	101	67-123	3	20	
Isoflurane	ug/L	15.6	50	50	72.2	69.8	113	108	45-140	3	20	
m&p-Xylene	ug/L	ND	100	100	112	110	112	110	56-136	2	20	
Methoxyflurane	ug/L	ND	50	50	43.5	42.2	87	84	75-119	3	20	
Methylene Chloride	ug/L	ND	50	50	50.4	49.9	101	100	45-166	1	20	
o-Xylene	ug/L	ND	50	50	56.4	54.6	113	109	57-133	3	20	
Styrene	ug/L	ND	50	50	56.6	55.1	113	110	58-144	3	20	
Tetrachloroethene	ug/L	ND	50	50	67.0	66.6	134	133	48-143	1	20	
Toluene	ug/L	ND	50	50	54.9	52.4	110	105	59-136	5	20	
Total Haloether	ug/L	24.0			581	573				1		
trans-1,2-Dichloroethene	ug/L	ND	50	50	56.7	52.6	113	105	57-132	8	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	54.8	52.1	110	104	59-154	5	20	
Trichloroethene	ug/L	ND	50	50	57.7	54.4	115	109	58-140	6	20	
Trichlorofluoromethane	ug/L	ND	50	50	64.2	65.9	128	132	24-175	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068274

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 424389 424390

Parameter	Units	2068274008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	ND	50	50	50.9	50.4	102	101	21-150	1	20	
4-Bromofluorobenzene (S)	%.						98	101	68-124			
Dibromofluoromethane (S)	%.						102	107	72-126			
Toluene-d8 (S)	%.						98	99	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2068274

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2068274

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2068274001	**TB-20180103**	EPA 5030B/8260	98583		
2068274002	**EB-20180103**	EPA 5030B/8260	98583		
2068274003	**FB-20180103**	EPA 5030B/8260	98583		
2068274004	**RW-2**	EPA 5030B/8260	98583		
2068274005	**RW-4**	EPA 5030B/8260	98583		
2068274006	**EB-20180104**	EPA 5030B/8260	98583		
2068274007	**FB-20180104**	EPA 5030B/8260	98583		
2068274008	**MW-2C-1BR**	EPA 5030B/8260	98583		
2068274009	**MW-2C-4**	EPA 5030B/8260	98583		
2068274010	**MW-2C-2**	EPA 5030B/8260	98583		
2068274011	**MW-2C-5**	EPA 5030B/8260	98583		

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CHAIN-OF-CUSTODY / WO# : 2068274

The Chain-of-Custody is a LEGAL DOCUM

2068274

1 of 1

1947862

Section A Required Client Information:

Company: Arcadis
Address: #48 City View Plaza Suite 401
Rd 165 Km 1.2 Guaynabo P.R 00968
Email To:
Phone: Fax:
Requested Due Date/TAT: Std

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Fibers 25APR2017 (P.O.# 6000191100517084
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: craig.mccolum@pacelabs.com
Pace Profile #: 1037 L12

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): VOC 8260 Trip Blank; VOC 8260

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	VOC 8260 Trip Blank	VOC 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-20180103	WT	G			01/03/18	LAB		2				2					X			
2	EB-20180103	WT	G			01/03/18	0810		3				3						X		
3	FB-20180103	WT	G			01/03/18	1052		3				3						X		
4	RW-2	WT	G			01/03/18	1058		3				3						X		
5	RW-4	WT	G			01/03/18	1120		3				3						X		
6	EB-20180104	WT	G			01/04/18	0750		3				3						X		
7	FB-20180104	WT	G			01/04/18	0924		3				3						X		
8	MW-2C-IBR	WT	G			01/04/18	1010		3				3						X		
9	MW-2C-4	WT	G			01/04/18	1038		3				3						X		
10	MW-2C-2	WT	G			01/04/18	1133		3				3						X		
11	MW-2C-5	WT	G			01/04/18	1219		3				3						X		
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colon / Arcadis	01/04/18	1445	[signature]	01/04/18	1445	4/8	Y	N	Y
	Fed Ex	1/5/18	0805	Fed Ex [signature]	1/5/18	0805	0.2	Y	Y	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Andrés Colon
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 01/04/18

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon

WO# : 2068274

PM: CJM Due Date: 01/19/18
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Cust... ther

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 1/5/18 JHB

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☐No	☑N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO_3 _____ H_2SO_4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15 2 voa vials >6mm

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, LLC
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(504)469-0333

January 29, 2018

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2068819

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on January 13, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2068819

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 17-016-0
Illinois Certification #: 200030
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212018-1
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2068819

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2068819001	**TB-20180108**	Water	01/08/18 00:00	01/13/18 08:40
2068819002	**EB-20180108**	Water	01/08/18 08:40	01/13/18 08:40
2068819003	**FB-20180108**	Water	01/08/18 10:20	01/13/18 08:40
2068819004	**MW-1C-2**	Water	01/08/18 10:26	01/13/18 08:40
2068819005	**MW-1C-3**	Water	01/08/18 12:04	01/13/18 08:40
2068819006	**MW-1C-4**	Water	01/08/18 12:55	01/13/18 08:40
2068819007	**EB-20180109**	Water	01/09/18 07:55	01/13/18 08:40
2068819008	**FB-20180109**	Water	01/09/18 09:18	01/13/18 08:40
2068819009	**USGS-TW-A2**	Water	01/09/18 11:18	01/13/18 08:40
2068819010	**USGS-TW-A1**	Water	01/09/18 12:54	01/13/18 08:40
2068819011	**GWDUP003**	Water	01/09/18 00:00	01/13/18 08:40
2068819012	**RW-5**	Water	01/09/18 13:24	01/13/18 08:40
2068819013	**EB-20180110**	Water	01/10/18 07:45	01/13/18 08:40
2068819014	**FB-20180110**	Water	01/10/18 09:13	01/13/18 08:40
2068819015	**FMW-6-90**	Water	01/10/18 10:30	01/13/18 08:40
2068819016	**MW-2**	Water	01/10/18 11:26	01/13/18 08:40
2068819017	**MW-4C-2**	Water	01/10/18 12:28	01/13/18 08:40
2068819018	**MW-4C-4**	Water	01/10/18 13:11	01/13/18 08:40

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2068819

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2068819001	**TB-20180108**	EPA 5030B/8260	GEM	56	PASI-N
2068819002	**EB-20180108**	EPA 5030B/8260	GEM	56	PASI-N
2068819003	**FB-20180108**	EPA 5030B/8260	GEM	56	PASI-N
2068819004	**MW-1C-2**	EPA 5030B/8260	GEM	56	PASI-N
2068819005	**MW-1C-3**	EPA 5030B/8260	GEM	56	PASI-N
2068819006	**MW-1C-4**	EPA 5030B/8260	GEM	56	PASI-N
2068819007	**EB-20180109**	EPA 5030B/8260	GEM	56	PASI-N
2068819008	**FB-20180109**	EPA 5030B/8260	GEM	56	PASI-N
2068819009	**USGS-TW-A2**	EPA 5030B/8260	GEM	56	PASI-N
2068819010	**USGS-TW-A1**	EPA 5030B/8260	GEM	56	PASI-N
2068819011	**GWDUP003**	EPA 5030B/8260	GEM	56	PASI-N
2068819012	**RW-5**	EPA 5030B/8260	GEM	56	PASI-N
2068819013	**EB-20180110**	EPA 5030B/8260	GEM	56	PASI-N
2068819014	**FB-20180110**	EPA 5030B/8260	GEM	56	PASI-N
2068819015	**FMW-6-90**	EPA 5030B/8260	GEM	56	PASI-N
		EPA 300.0	OL	1	PASI-K
2068819016	**MW-2**	EPA 5030B/8260	GEM	56	PASI-N
2068819017	**MW-4C-2**	EPA 5030B/8260	GEM	56	PASI-N
2068819018	**MW-4C-4**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2068819

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: January 29, 2018

General Information:
18 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 99295

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2068819012

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 427960)
  - 1,1,2-Trichlorotrifluoroethane

Additional Comments:

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2068819

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: ARCADIS
Date: January 29, 2018

General Information:
1 sample was analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: TB-20180108 **Lab ID: 2068819001** Collected: 01/08/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 13:06	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 13:06	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 13:06	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 13:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 13:06	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 13:06	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 13:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 13:06	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 13:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 13:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 13:06	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 13:06	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 13:06	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 13:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 13:06	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 13:06	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 13:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:06	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 13:06	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 13:06	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 406	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 421	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 427	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 428	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 508	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 528	ND	ug/L	1.0	1		01/18/18 13:06		
Halomar	ND	ug/L	1.0	1		01/18/18 13:06		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 13:06	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 13:06		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 13:06	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 13:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 13:06	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 13:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 13:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 13:06	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 13:06	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 13:06		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: TB-20180108 **Lab ID: 2068819001** Collected: 01/08/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 13:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 13:06	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 13:06	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 13:06	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 13:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 13:06	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/18/18 13:06	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/18/18 13:06	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/18/18 13:06	1868-53-7	

Sample: EB-20180108 **Lab ID: 2068819002** Collected: 01/08/18 08:40 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.5**	ug/L	4.0	1		01/18/18 13:24	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 13:24	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 13:24	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 13:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 13:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 13:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 13:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 13:24	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 13:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 13:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 13:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 13:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 13:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 13:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 13:24	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 13:24	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 13:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:24	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 13:24	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 13:24	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 406	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 421	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 427	ND	ug/L	1.0	1		01/18/18 13:24		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180108 **Lab ID: 2068819002** Collected: 01/08/18 08:40 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 508	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 528	ND	ug/L	1.0	1		01/18/18 13:24		
Halomar	ND	ug/L	1.0	1		01/18/18 13:24		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 13:24	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 13:24		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 13:24	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 13:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 13:24	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 13:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 13:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 13:24	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 13:24	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 13:24		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 13:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 13:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 13:24	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 13:24	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 13:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 13:24	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 13:24	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 13:24	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/18/18 13:24	1868-53-7	

Sample: FB-20180108 **Lab ID: 2068819003** Collected: 01/08/18 10:20 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.1**	ug/L	4.0	1		01/18/18 13:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 13:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 13:42	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 13:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 13:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 13:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 13:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 13:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 13:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 13:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 13:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 13:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 13:42	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FB-20180108 **Lab ID: 2068819003** Collected: 01/08/18 10:20 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 13:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 13:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 13:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 13:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 13:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 13:42	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 406	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 421	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 427	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 428	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 508	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 528	ND	ug/L	1.0	1		01/18/18 13:42		
Halomar	ND	ug/L	1.0	1		01/18/18 13:42		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 13:42	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 13:42		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 13:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 13:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 13:42	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 13:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 13:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 13:42	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 13:42	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 13:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 13:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 13:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 13:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 13:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 13:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 13:42	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/18/18 13:42	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 13:42	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 13:42	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-2 **Lab ID: 2068819004** Collected: 01/08/18 10:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 14:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 14:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:00	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:00		
Halomar	ND	ug/L	1.0	1		01/18/18 14:00		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:00	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:00		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:00	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:00	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		01/18/18 14:00	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:00	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-2 **Lab ID: 2068819004** Collected: 01/08/18 10:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:00	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/18/18 14:00	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	68-124	1		01/18/18 14:00	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/18/18 14:00	1868-53-7	

Sample: MW-1C-3 **Lab ID: 2068819005** Collected: 01/08/18 12:04 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.7**	ug/L	4.0	1		01/18/18 14:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 14:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:18	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:18	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:18		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-3 **Lab ID: 2068819005** Collected: 01/08/18 12:04 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:18		
Halomar	ND	ug/L	1.0	1		01/18/18 14:18		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:18	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:18		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:18	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:18	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	1		01/18/18 14:18	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:18	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:18	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 14:18	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 14:18	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 14:18	1868-53-7	

Sample: MW-1C-4 **Lab ID: 2068819006** Collected: 01/08/18 12:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 14:35	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 14:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:35	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:35	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-4 **Lab ID: 2068819006** Collected: 01/08/18 12:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:35		
Halomar	ND	ug/L	1.0	1		01/18/18 14:35		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:35	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:35		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:35	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 14:35	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:35	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:35	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 14:35	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 14:35	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 14:35	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180109 **Lab ID: 2068819007** Collected: 01/09/18 07:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 14:53	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 14:53	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:53	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:53	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:53	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:53	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:53	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:53	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:53	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:53	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:53	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:53	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:53		
Halomar	ND	ug/L	1.0	1		01/18/18 14:53		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:53	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:53		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:53	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:53	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 14:53	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:53	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:53		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180109 **Lab ID: 2068819007** Collected: 01/09/18 07:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:53	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:53	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:53	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:53	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 14:53	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 14:53	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/18/18 14:53	1868-53-7	

Sample: FB-20180109 **Lab ID: 2068819008** Collected: 01/09/18 09:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.3**	ug/L	4.0	1		01/18/18 15:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 15:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 15:11	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 15:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 15:11	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 15:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 15:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 15:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 15:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 15:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 15:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 15:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 15:11	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 15:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 15:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 15:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 15:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 15:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 15:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 406	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 421	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 427	ND	ug/L	1.0	1		01/18/18 15:11		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FB-20180109 **Lab ID: 2068819008** Collected: 01/09/18 09:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 508	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 528	ND	ug/L	1.0	1		01/18/18 15:11		
Halomar	ND	ug/L	1.0	1		01/18/18 15:11		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 15:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 15:11		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 15:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 15:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 15:11	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 15:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 15:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 15:11	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 15:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 15:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 15:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 15:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 15:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 15:11	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 15:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 15:11	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/18/18 15:11	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 15:11	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/18/18 15:11	1868-53-7	

Sample: USGS-TW-A2 **Lab ID: 2068819009** Collected: 01/09/18 11:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 15:28	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 15:28	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 15:28	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 15:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 15:28	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 15:28	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 15:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 15:28	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 15:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 15:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 15:28	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 15:28	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 15:28	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: USGS-TW-A2 **Lab ID: 2068819009** Collected: 01/09/18 11:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 15:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 15:28	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 15:28	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 15:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:28	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 15:28	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 15:28	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 406	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 421	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 427	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 428	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 508	**2.7**	ug/L	1.0	1		01/18/18 15:28		
Haloether 528	ND	ug/L	1.0	1		01/18/18 15:28		
Halomar	ND	ug/L	1.0	1		01/18/18 15:28		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 15:28	591-78-6	
Isoflurane	**3.8**	ug/L	1.0	1		01/18/18 15:28		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 15:28	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 15:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 15:28	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 15:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 15:28	79-34-5	
Tetrachloroethene	**1.7**	ug/L	1.0	1		01/18/18 15:28	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 15:28	108-88-3	
Total Haloether	**6.5**	ug/L	1.0	1		01/18/18 15:28		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 15:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 15:28	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 15:28	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 15:28	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 15:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 15:28	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 15:28	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 15:28	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/18/18 15:28	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: USGS-TW-A1 **Lab ID: 2068819010** Collected: 01/09/18 12:54 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 15:46	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 15:46	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 15:46	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 15:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 15:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 15:46	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 15:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 15:46	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 15:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 15:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 15:46	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 15:46	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 15:46	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 15:46	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 15:46	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 15:46	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 15:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:46	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 15:46	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 15:46	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 406	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 421	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 427	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 428	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 508	**7.4**	ug/L	1.0	1		01/18/18 15:46		
Haloether 528	ND	ug/L	1.0	1		01/18/18 15:46		
Halomar	ND	ug/L	1.0	1		01/18/18 15:46		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 15:46	591-78-6	
Isoflurane	**4.5**	ug/L	1.0	1		01/18/18 15:46		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 15:46	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 15:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 15:46	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 15:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 15:46	79-34-5	
Tetrachloroethene	**3.5**	ug/L	1.0	1		01/18/18 15:46	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 15:46	108-88-3	
Total Haloether	**12.0**	ug/L	1.0	1		01/18/18 15:46		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	79-00-5	
Trichloroethene	**1.1**	ug/L	1.0	1		01/18/18 15:46	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: USGS-TW-A1 **Lab ID: 2068819010** Collected: 01/09/18 12:54 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 15:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 15:46	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 15:46	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 15:46	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 15:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 15:46	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/18/18 15:46	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/18/18 15:46	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 15:46	1868-53-7	

Sample: GWDUP003 **Lab ID: 2068819011** Collected: 01/09/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:04	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:04	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:04	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:04	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:04	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:04	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:04	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:04	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:04	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:04	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 16:04	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:04	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:04		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: GWDUP003 **Lab ID: 2068819011** Collected: 01/09/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 508	**7.6**	ug/L	1.0	1		01/18/18 16:04		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:04		
Halomar	ND	ug/L	1.0	1		01/18/18 16:04		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:04	591-78-6	
Isoflurane	**4.7**	ug/L	1.0	1		01/18/18 16:04		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:04	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:04	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:04	79-34-5	
Tetrachloroethene	**3.4**	ug/L	1.0	1		01/18/18 16:04	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:04	108-88-3	
Total Haloether	**12.3**	ug/L	1.0	1		01/18/18 16:04		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	79-00-5	
Trichloroethene	**1.1**	ug/L	1.0	1		01/18/18 16:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:04	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:04	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:04	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 16:04	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/18/18 16:04	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 16:04	1868-53-7	

Sample: RW-5 **Lab ID: 2068819012** Collected: 01/09/18 13:24 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 12:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 12:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 12:48	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 12:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 12:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 12:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 12:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 12:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 12:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 12:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 12:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 12:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 12:48	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: RW-5 **Lab ID: 2068819012** Collected: 01/09/18 13:24 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 12:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 12:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 12:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 12:48	75-35-4	
cis-1,2-Dichloroethene	**1.4**	ug/L	1.0	1		01/18/18 12:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 12:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 12:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 12:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 12:48	10061-02-6	
Enflurane	**2.5**	ug/L	1.0	1		01/18/18 12:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 12:48	100-41-4	
Haloether 229	**8.3**	ug/L	1.0	1		01/18/18 12:48		
Haloether 406	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 421	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 427	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 428	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 508	**58.3**	ug/L	1.0	1		01/18/18 12:48		
Haloether 528	ND	ug/L	1.0	1		01/18/18 12:48		
Halomar	**1.4**	ug/L	1.0	1		01/18/18 12:48		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 12:48	591-78-6	
Isoflurane	**32.8**	ug/L	1.0	1		01/18/18 12:48		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 12:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 12:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 12:48	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 12:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 12:48	79-34-5	
Tetrachloroethene	**16.8**	ug/L	1.0	1		01/18/18 12:48	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 12:48	108-88-3	
Total Haloether	**103**	ug/L	1.0	1		01/18/18 12:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	79-00-5	
Trichloroethene	**1.0**	ug/L	1.0	1		01/18/18 12:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 12:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 12:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 12:48	76-13-1	M1
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 12:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 12:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 12:48	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/18/18 12:48	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 12:48	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 12:48	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180110 **Lab ID: 2068819013** Collected: 01/10/18 07:45 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 17:15	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 17:15	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 17:15	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 17:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 17:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 17:15	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 17:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 17:15	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 17:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 17:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 17:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 17:15	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 17:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 17:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 17:15	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 17:15	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 17:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:15	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 17:15	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 17:15	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 406	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 421	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 427	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 428	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 508	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 528	ND	ug/L	1.0	1		01/18/18 17:15		
Halomar	ND	ug/L	1.0	1		01/18/18 17:15		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 17:15	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 17:15		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 17:15	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 17:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 17:15	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 17:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 17:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 17:15	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 17:15	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 17:15		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180110 **Lab ID: 2068819013** Collected: 01/10/18 07:45 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 17:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 17:15	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 17:15	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 17:15	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 17:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 17:15	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 17:15	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/18/18 17:15	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		01/18/18 17:15	1868-53-7	

Sample: FB-20180110 **Lab ID: 2068819014** Collected: 01/10/18 09:13 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 17:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 17:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 17:33	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 17:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 17:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 17:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 17:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 17:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 17:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 17:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 17:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 17:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 17:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 17:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 17:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 17:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 17:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 17:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 17:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 406	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 421	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 427	ND	ug/L	1.0	1		01/18/18 17:33		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FB-20180110 **Lab ID: 2068819014** Collected: 01/10/18 09:13 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 508	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 528	ND	ug/L	1.0	1		01/18/18 17:33		
Halomar	ND	ug/L	1.0	1		01/18/18 17:33		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 17:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 17:33		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 17:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 17:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 17:33	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 17:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 17:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 17:33	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 17:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 17:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 17:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 17:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 17:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 17:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 17:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 17:33	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 17:33	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 17:33	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 17:33	1868-53-7	

Sample: FMW-6-90 **Lab ID: 2068819015** Collected: 01/10/18 10:30 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:22	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:22	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:22	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FMW-6-90 **Lab ID: 2068819015** Collected: 01/10/18 10:30 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 16:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:22	100-41-4	
Haloether 229	**2.2**	ug/L	1.0	1		01/18/18 16:22		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 508	**4.1**	ug/L	1.0	1		01/18/18 16:22		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:22		
Halomar	ND	ug/L	1.0	1		01/18/18 16:22		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:22	591-78-6	
Isoflurane	**10.6**	ug/L	1.0	1		01/18/18 16:22		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:22	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 16:22	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:22	108-88-3	
Total Haloether	**16.8**	ug/L	1.0	1		01/18/18 16:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:22	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 16:22	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/18/18 16:22	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/18/18 16:22	1868-53-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	**73.2**	mg/L	5.0	5		01/25/18 01:13	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-2 **Lab ID: 2068819016** Collected: 01/10/18 11:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:40	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 16:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 508	**6.6**	ug/L	1.0	1		01/18/18 16:40		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:40		
Halomar	ND	ug/L	1.0	1		01/18/18 16:40		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:40	591-78-6	
Isoflurane	**2.8**	ug/L	1.0	1		01/18/18 16:40		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:40	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 16:40	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:40	108-88-3	
Total Haloether	**9.4**	ug/L	1.0	1		01/18/18 16:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-2 **Lab ID: 2068819016** Collected: 01/10/18 11:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 16:40	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 16:40	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/18/18 16:40	1868-53-7	

Sample: MW-4C-2 **Lab ID: 2068819017** Collected: 01/10/18 12:28 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:58	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:58	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:58	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:58	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:58	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:58	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:58	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:58	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:58	10061-02-6	
Enflurane	**3.8**	ug/L	1.0	1		01/18/18 16:58	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:58	100-41-4	
Haloether 229	**4.2**	ug/L	1.0	1		01/18/18 16:58		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:58		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:58		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:58		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-4C-2 **Lab ID: 2068819017** Collected: 01/10/18 12:28 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:58		
Haloether 508	**16.7**	ug/L	1.0	1		01/18/18 16:58		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:58		
Halomar	**1.3**	ug/L	1.0	1		01/18/18 16:58		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:58	591-78-6	
Isoflurane	**28.0**	ug/L	1.0	1		01/18/18 16:58		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:58	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:58	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:58	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	1		01/18/18 16:58	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:58	108-88-3	
Total Haloether	**54.0**	ug/L	1.0	1		01/18/18 16:58		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:58	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:58	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:58	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 16:58	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 16:58	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 16:58	1868-53-7	

Sample: MW-4C-4 **Lab ID: 2068819018** Collected: 01/10/18 13:11 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 18:44	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 18:44	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 18:44	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 18:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 18:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 18:44	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 18:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 18:44	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 18:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 18:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 18:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 18:44	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 18:44	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-4C-4 **Lab ID: 2068819018** Collected: 01/10/18 13:11 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 18:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 18:44	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 18:44	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 18:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 18:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 18:44	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 18:44	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 18:44	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 406	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 421	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 427	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 428	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 508	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 528	ND	ug/L	1.0	1		01/18/18 18:44		
Halomar	ND	ug/L	1.0	1		01/18/18 18:44		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 18:44	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 18:44		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 18:44	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 18:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 18:44	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 18:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 18:44	79-34-5	
Tetrachloroethene	**1.7**	ug/L	1.0	1		01/18/18 18:44	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 18:44	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 18:44		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 18:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 18:44	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 18:44	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 18:44	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 18:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 18:44	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 18:44	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 18:44	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 18:44	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

QC Batch: 99295 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2068819001, 2068819002, 2068819003, 2068819004, 2068819005, 2068819006, 2068819007, 2068819008, 2068819009, 2068819010, 2068819011, 2068819012, 2068819013, 2068819014, 2068819015, 2068819016, 2068819017, 2068819018

METHOD BLANK: 427958 | Matrix: Water
Associated Lab Samples: 2068819001, 2068819002, 2068819003, 2068819004, 2068819005, 2068819006, 2068819007, 2068819008, 2068819009, 2068819010, 2068819011, 2068819012, 2068819013, 2068819014, 2068819015, 2068819016, 2068819017, 2068819018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/18/18 10:28	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/18/18 10:28	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/18/18 10:28	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	01/18/18 10:28	
1,1-Dichloroethane	ug/L	ND	1.0	01/18/18 10:28	
1,1-Dichloroethene	ug/L	ND	1.0	01/18/18 10:28	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/18/18 10:28	
1,2-Dichloroethane	ug/L	ND	1.0	01/18/18 10:28	
1,2-Dichloropropane	ug/L	ND	1.0	01/18/18 10:28	
2-Butanone (MEK)	ug/L	ND	2.0	01/18/18 10:28	
2-Hexanone	ug/L	ND	2.0	01/18/18 10:28	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	01/18/18 10:28	
Acetone	ug/L	ND	4.0	01/18/18 10:28	
Acrolein	ug/L	ND	8.0	01/18/18 10:28	
Acrylonitrile	ug/L	ND	4.0	01/18/18 10:28	
Benzene	ug/L	ND	1.0	01/18/18 10:28	
Bromodichloromethane	ug/L	ND	1.0	01/18/18 10:28	
Bromoform	ug/L	ND	1.0	01/18/18 10:28	
Bromomethane	ug/L	ND	1.0	01/18/18 10:28	
Carbon disulfide	ug/L	ND	1.0	01/18/18 10:28	
Carbon tetrachloride	ug/L	ND	1.0	01/18/18 10:28	
Chlorobenzene	ug/L	ND	1.0	01/18/18 10:28	
Chloroethane	ug/L	ND	1.0	01/18/18 10:28	
Chloroform	ug/L	ND	1.0	01/18/18 10:28	
Chloromethane	ug/L	ND	1.0	01/18/18 10:28	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/18/18 10:28	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/18/18 10:28	
Dibromochloromethane	ug/L	ND	1.0	01/18/18 10:28	
Dibromomethane	ug/L	ND	1.0	01/18/18 10:28	
Enflurane	ug/L	ND	1.0	01/18/18 10:28	
Ethylbenzene	ug/L	ND	1.0	01/18/18 10:28	
Haloether 229	ug/L	ND	1.0	01/18/18 10:28	
Haloether 406	ug/L	ND	1.0	01/18/18 10:28	
Haloether 421	ug/L	ND	1.0	01/18/18 10:28	
Haloether 427	ug/L	ND	1.0	01/18/18 10:28	
Haloether 428	ug/L	ND	1.0	01/18/18 10:28	
Haloether 508	ug/L	ND	1.0	01/18/18 10:28	
Haloether 528	ug/L	ND	1.0	01/18/18 10:28	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

METHOD BLANK: 427958 Matrix: Water

Associated Lab Samples: 2068819001, 2068819002, 2068819003, 2068819004, 2068819005, 2068819006, 2068819007, 2068819008, 2068819009, 2068819010, 2068819011, 2068819012, 2068819013, 2068819014, 2068819015, 2068819016, 2068819017, 2068819018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Halomar	ug/L	ND	1.0	01/18/18 10:28	
Isoflurane	ug/L	ND	1.0	01/18/18 10:28	
m&p-Xylene	ug/L	ND	2.0	01/18/18 10:28	
Methoxyflurane	ug/L	ND	1.0	01/18/18 10:28	
Methylene Chloride	ug/L	ND	5.0	01/18/18 10:28	
o-Xylene	ug/L	ND	1.0	01/18/18 10:28	
Styrene	ug/L	ND	1.0	01/18/18 10:28	
Tetrachloroethene	ug/L	ND	1.0	01/18/18 10:28	
Toluene	ug/L	ND	1.0	01/18/18 10:28	
Total Haloether	ug/L	ND	1.0	01/18/18 10:28	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/18/18 10:28	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/18/18 10:28	
Trichloroethene	ug/L	ND	1.0	01/18/18 10:28	
Trichlorofluoromethane	ug/L	ND	1.0	01/18/18 10:28	
Vinyl chloride	ug/L	ND	1.0	01/18/18 10:28	
4-Bromofluorobenzene (S)	%.	99	68-124	01/18/18 10:28	
Dibromofluoromethane (S)	%.	102	72-126	01/18/18 10:28	
Toluene-d8 (S)	%.	100	79-119	01/18/18 10:28	

METHOD BLANK: 428066 Matrix: Water

Associated Lab Samples: 2068819001, 2068819002, 2068819003, 2068819004, 2068819005, 2068819006, 2068819007, 2068819008, 2068819009, 2068819010, 2068819011, 2068819012, 2068819013, 2068819014, 2068819015, 2068819016, 2068819017, 2068819018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/18/18 17:51	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/18/18 17:51	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/18/18 17:51	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	01/18/18 17:51	
1,1-Dichloroethane	ug/L	ND	1.0	01/18/18 17:51	
1,1-Dichloroethene	ug/L	ND	1.0	01/18/18 17:51	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/18/18 17:51	
1,2-Dichloroethane	ug/L	ND	1.0	01/18/18 17:51	
1,2-Dichloropropane	ug/L	ND	1.0	01/18/18 17:51	
2-Butanone (MEK)	ug/L	ND	2.0	01/18/18 17:51	
2-Hexanone	ug/L	ND	2.0	01/18/18 17:51	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	01/18/18 17:51	
Acetone	ug/L	ND	4.0	01/18/18 17:51	
Acrolein	ug/L	ND	8.0	01/18/18 17:51	
Acrylonitrile	ug/L	ND	4.0	01/18/18 17:51	
Benzene	ug/L	ND	1.0	01/18/18 17:51	
Bromodichloromethane	ug/L	ND	1.0	01/18/18 17:51	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

METHOD BLANK: 428066 Matrix: Water

Associated Lab Samples: 2068819001, 2068819002, 2068819003, 2068819004, 2068819005, 2068819006, 2068819007, 2068819008, 2068819009, 2068819010, 2068819011, 2068819012, 2068819013, 2068819014, 2068819015, 2068819016, 2068819017, 2068819018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromoform	ug/L	ND	1.0	01/18/18 17:51	
Bromomethane	ug/L	ND	1.0	01/18/18 17:51	
Carbon disulfide	ug/L	ND	1.0	01/18/18 17:51	
Carbon tetrachloride	ug/L	ND	1.0	01/18/18 17:51	
Chlorobenzene	ug/L	ND	1.0	01/18/18 17:51	
Chloroethane	ug/L	ND	1.0	01/18/18 17:51	
Chloroform	ug/L	ND	1.0	01/18/18 17:51	
Chloromethane	ug/L	ND	1.0	01/18/18 17:51	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/18/18 17:51	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/18/18 17:51	
Dibromochloromethane	ug/L	ND	1.0	01/18/18 17:51	
Dibromomethane	ug/L	ND	1.0	01/18/18 17:51	
Enflurane	ug/L	ND	1.0	01/18/18 17:51	
Ethylbenzene	ug/L	ND	1.0	01/18/18 17:51	
Haloether 229	ug/L	ND	1.0	01/18/18 17:51	
Haloether 406	ug/L	ND	1.0	01/18/18 17:51	
Haloether 421	ug/L	ND	1.0	01/18/18 17:51	
Haloether 427	ug/L	ND	1.0	01/18/18 17:51	
Haloether 428	ug/L	ND	1.0	01/18/18 17:51	
Haloether 508	ug/L	ND	1.0	01/18/18 17:51	
Haloether 528	ug/L	ND	1.0	01/18/18 17:51	
Halomar	ug/L	ND	1.0	01/18/18 17:51	
Isoflurane	ug/L	ND	1.0	01/18/18 17:51	
m&p-Xylene	ug/L	ND	2.0	01/18/18 17:51	
Methoxyflurane	ug/L	ND	1.0	01/18/18 17:51	
Methylene Chloride	ug/L	ND	5.0	01/18/18 17:51	
o-Xylene	ug/L	ND	1.0	01/18/18 17:51	
Styrene	ug/L	ND	1.0	01/18/18 17:51	
Tetrachloroethene	ug/L	ND	1.0	01/18/18 17:51	
Toluene	ug/L	ND	1.0	01/18/18 17:51	
Total Haloether	ug/L	ND	1.0	01/18/18 17:51	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/18/18 17:51	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/18/18 17:51	
Trichloroethene	ug/L	ND	1.0	01/18/18 17:51	
Trichlorofluoromethane	ug/L	ND	1.0	01/18/18 17:51	
Vinyl chloride	ug/L	ND	1.0	01/18/18 17:51	
4-Bromofluorobenzene (S)	%.	102	68-124	01/18/18 17:51	
Dibromofluoromethane (S)	%.	98	72-126	01/18/18 17:51	
Toluene-d8 (S)	%.	101	79-119	01/18/18 17:51	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

LABORATORY CONTROL SAMPLE: 427959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.7	109	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	50.3	101	15-179	
1,1,2-Trichloroethane	ug/L	50	46.1	92	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	58.7	117	38-121	
1,1-Dichloroethane	ug/L	50	52.7	105	63-129	
1,1-Dichloroethene	ug/L	50	54.3	109	51-139	
1,2,3-Trichloropropane	ug/L	50	43.5	87	13-187	
1,2-Dichloroethane	ug/L	50	48.0	96	57-148	
1,2-Dichloropropane	ug/L	50	50.1	100	66-128	
2-Butanone (MEK)	ug/L	50	47.1	94	32-183	
2-Hexanone	ug/L	50	45.3	91	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	47.5	95	26-171	
Acetone	ug/L	50	46.9	94	22-165	
Acrolein	ug/L	50	45.7	91	10-131	
Acrylonitrile	ug/L	50	48.0	96	18-149	
Benzene	ug/L	50	47.3	95	62-131	
Bromodichloromethane	ug/L	50	51.0	102	69-132	
Bromoform	ug/L	50	45.2	90	35-166	
Bromomethane	ug/L	50	46.2	92	34-158	
Carbon disulfide	ug/L	50	54.9	110	31-128	
Carbon tetrachloride	ug/L	50	50.6	101	54-144	
Chlorobenzene	ug/L	50	50.3	101	70-127	
Chloroethane	ug/L	50	47.9	96	17-195	
Chloroform	ug/L	50	50.4	101	73-134	
Chloromethane	ug/L	50	43.5	87	17-153	
cis-1,2-Dichloroethene	ug/L	50	50.3	101	68-129	
cis-1,3-Dichloropropene	ug/L	50	52.8	106	72-138	
Dibromochloromethane	ug/L	50	50.3	101	49-146	
Dibromomethane	ug/L	50	47.8	96	56-145	
Enflurane	ug/L	50	55.8	112	56-135	
Ethylbenzene	ug/L	50	48.0	96	66-126	
Haloether 229	ug/L	50	55.8	112	62-123	
Haloether 406	ug/L	50	49.1	98	62-134	
Haloether 421	ug/L	50	39.7	79	70-128	
Haloether 427	ug/L	50	48.5	97	69-153	
Haloether 428	ug/L	50	46.6	93	70-134	
Haloether 508	ug/L	50	51.8	104	52-139	
Haloether 528	ug/L	50	42.2	84	48-157	
Halomar	ug/L	50	47.3	95	62-128	
Isoflurane	ug/L	50	54.4	109	61-132	
m&p-Xylene	ug/L	100	97.1	97	65-129	
Methoxyflurane	ug/L	50	39.7	79	72-124	
Methylene Chloride	ug/L	50	50.6	101	46-168	
o-Xylene	ug/L	50	47.9	96	65-124	
Styrene	ug/L	50	50.7	101	72-133	
Tetrachloroethene	ug/L	50	53.6	107	46-157	
Toluene	ug/L	50	46.5	93	69-126	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

LABORATORY CONTROL SAMPLE: 427959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Haloether	ug/L		531			
trans-1,2-Dichloroethene	ug/L	50	54.2	108	60-129	
trans-1,3-Dichloropropene	ug/L	50	49.1	98	59-149	
Trichloroethene	ug/L	50	48.9	98	67-132	
Trichlorofluoromethane	ug/L	50	56.9	114	39-171	
Vinyl chloride	ug/L	50	50.0	100	27-149	
4-Bromofluorobenzene (S)	%.			98	68-124	
Dibromofluoromethane (S)	%.			104	72-126	
Toluene-d8 (S)	%.			100	79-119	

LABORATORY CONTROL SAMPLE: 428067

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.0	108	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	50.2	100	15-179	
1,1,2-Trichloroethane	ug/L	50	47.5	95	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	56.3	113	38-121	
1,1-Dichloroethane	ug/L	50	51.3	103	63-129	
1,1-Dichloroethene	ug/L	50	50.1	100	51-139	
1,2,3-Trichloropropane	ug/L	50	45.0	90	13-187	
1,2-Dichloroethane	ug/L	50	50.4	101	57-148	
1,2-Dichloropropane	ug/L	50	52.0	104	66-128	
2-Butanone (MEK)	ug/L	50	46.6	93	32-183	
2-Hexanone	ug/L	50	49.2	98	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	50.0	100	26-171	
Acetone	ug/L	50	47.2	94	22-165	
Acrolein	ug/L	50	48.4	97	10-131	
Acrylonitrile	ug/L	50	49.3	99	18-149	
Benzene	ug/L	50	48.3	97	62-131	
Bromodichloromethane	ug/L	50	52.5	105	69-132	
Bromoform	ug/L	50	46.5	93	35-166	
Bromomethane	ug/L	50	44.7	89	34-158	
Carbon disulfide	ug/L	50	51.2	102	31-128	
Carbon tetrachloride	ug/L	50	51.9	104	54-144	
Chlorobenzene	ug/L	50	51.7	103	70-127	
Chloroethane	ug/L	50	45.3	91	17-195	
Chloroform	ug/L	50	49.7	99	73-134	
Chloromethane	ug/L	50	40.6	81	17-153	
cis-1,2-Dichloroethene	ug/L	50	48.5	97	68-129	
cis-1,3-Dichloropropene	ug/L	50	52.8	106	72-138	
Dibromochloromethane	ug/L	50	51.3	103	49-146	
Dibromomethane	ug/L	50	49.3	99	56-145	
Enflurane	ug/L	50	54.5	109	56-135	
Ethylbenzene	ug/L	50	49.7	99	66-126	
Haloether 229	ug/L	50	54.2	108	62-123	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

LABORATORY CONTROL SAMPLE: 428067

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Haloether 406	ug/L	50	48.9	98	62-134	
Haloether 421	ug/L	50	40.9	82	70-128	
Haloether 427	ug/L	50	47.7	95	69-153	
Haloether 428	ug/L	50	47.0	94	70-134	
Haloether 508	ug/L	50	50.7	101	52-139	
Haloether 528	ug/L	50	40.8	82	48-157	
Halomar	ug/L	50	45.7	91	62-128	
Isoflurane	ug/L	50	53.7	107	61-132	
m&p-Xylene	ug/L	100	97.5	98	65-129	
Methoxyflurane	ug/L	50	41.4	83	72-124	
Methylene Chloride	ug/L	50	50.7	101	46-168	
o-Xylene	ug/L	50	49.7	99	65-124	
Styrene	ug/L	50	51.6	103	72-133	
Tetrachloroethene	ug/L	50	55.3	111	46-157	
Toluene	ug/L	50	47.5	95	69-126	
Total Haloether	ug/L		525			
trans-1,2-Dichloroethene	ug/L	50	54.5	109	60-129	
trans-1,3-Dichloropropene	ug/L	50	49.8	100	59-149	
Trichloroethene	ug/L	50	49.5	99	67-132	
Trichlorofluoromethane	ug/L	50	56.3	113	39-171	
Vinyl chloride	ug/L	50	46.2	92	27-149	
4-Bromofluorobenzene (S)	%.			98	68-124	
Dibromofluoromethane (S)	%.			99	72-126	
Toluene-d8 (S)	%.			101	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 427960 427961

Parameter	Units	2068819012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	56.2	54.7	112	109	54-137	3	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	47.3	48.2	95	96	15-187	2	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	45.0	45.4	90	91	59-148	1	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	62.3	58.0	123	114	40-117	7	20	M1
1,1-Dichloroethane	ug/L	ND	50	50	52.0	51.5	104	103	59-133	1	20	
1,1-Dichloroethene	ug/L	ND	50	50	56.6	50.7	113	101	44-146	11	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	45.9	44.7	92	89	14-199	3	20	
1,2-Dichloroethane	ug/L	ND	50	50	46.4	46.5	93	93	56-154	0	20	
1,2-Dichloropropane	ug/L	ND	50	50	48.7	48.6	97	97	62-135	0	20	
2-Butanone (MEK)	ug/L	ND	50	50	41.1	42.6	82	85	20-205	4	20	
2-Hexanone	ug/L	ND	50	50	43.7	46.2	87	92	25-189	5	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	45.4	47.0	91	94	23-184	3	20	
Acetone	ug/L	ND	50	50	40.5	42.4	76	80	11-217	5	20	
Acrolein	ug/L	ND	50	50	43.0	42.4	86	85	10-142	1	20	
Acrylonitrile	ug/L	ND	50	50	44.0	45.2	88	90	20-164	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 427960 427961

Parameter	Units	2068819012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	48.0	47.1	96	94	52-141	2	20	
Bromodichloromethane	ug/L	ND	50	50	50.5	49.4	101	99	70-134	2	20	
Bromoform	ug/L	ND	50	50	43.9	44.1	87	88	37-171	0	20	
Bromomethane	ug/L	ND	50	50	50.4	46.5	101	93	34-155	8	20	
Carbon disulfide	ug/L	ND	50	50	61.4	51.8	123	104	28-130	17	20	
Carbon tetrachloride	ug/L	ND	50	50	53.9	53.7	108	107	48-146	0	20	
Chlorobenzene	ug/L	ND	50	50	49.3	50.9	99	102	67-129	3	20	
Chloroethane	ug/L	ND	50	50	48.9	47.7	98	95	12-192	2	20	
Chloroform	ug/L	ND	50	50	49.7	49.6	98	98	66-143	0	20	
Chloromethane	ug/L	ND	50	50	44.1	41.6	88	83	14-155	6	20	
cis-1,2-Dichloroethene	ug/L	1.4	50	50	51.4	48.2	100	94	56-141	6	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	51.4	50.4	103	101	70-139	2	20	
Dibromochloromethane	ug/L	ND	50	50	48.6	49.1	97	98	50-150	1	20	
Dibromomethane	ug/L	ND	50	50	46.4	46.9	93	94	58-153	1	20	
Enflurane	ug/L	2.5	50	50	57.5	56.0	110	107	63-126	3	20	
Ethylbenzene	ug/L	ND	50	50	48.0	49.7	96	99	57-135	4	20	
Haloether 229	ug/L	8.3	50	50	68.0	68.1	120	120	56-127	0	20	
Haloether 406	ug/L	ND	50	50	51.1	51.3	101	101	68-128	0	20	
Haloether 421	ug/L	ND	50	50	40.7	40.9	81	82	74-120	0	20	
Haloether 427	ug/L	ND	50	50	50.8	52.1	102	104	78-120	3	20	
Haloether 428	ug/L	ND	50	50	48.1	49.9	96	100	74-125	4	20	
Haloether 508	ug/L	58.3	50	50	111	108	106	99	28-156	3	20	
Haloether 528	ug/L	ND	50	50	43.1	43.3	85	85	45-142	0	20	
Halomar	ug/L	1.4	50	50	49.6	48.5	96	94	67-123	2	20	
Isoflurane	ug/L	32.8	50	50	90.7	88.8	116	112	45-140	2	20	
m&p-Xylene	ug/L	ND	100	100	94.0	101	94	101	56-136	7	20	
Methoxyflurane	ug/L	ND	50	50	40.4	39.8	81	80	75-119	1	20	
Methylene Chloride	ug/L	ND	50	50	48.4	47.2	97	94	45-166	2	20	
o-Xylene	ug/L	ND	50	50	46.8	50.5	94	101	57-133	8	20	
Styrene	ug/L	ND	50	50	49.0	51.5	98	103	58-144	5	20	
Tetrachloroethene	ug/L	16.8	50	50	72.0	76.5	110	119	48-143	6	20	
Toluene	ug/L	ND	50	50	48.0	48.0	96	96	59-136	0	20	
Total Haloether	ug/L	103			651	647				1		
trans-1,2-Dichloroethene	ug/L	ND	50	50	55.4	52.8	111	106	57-132	5	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	47.9	48.1	96	96	59-154	0	20	
Trichloroethene	ug/L	1.0	50	50	53.2	51.0	104	100	58-140	4	20	
Trichlorofluoromethane	ug/L	ND	50	50	61.3	60.8	122	120	24-175	1	20	
Vinyl chloride	ug/L	ND	50	50	51.2	51.1	102	102	21-150	0	20	
4-Bromofluorobenzene (S)	%.						98	98	68-124			
Dibromofluoromethane (S)	%.						102	100	72-126			
Toluene-d8 (S)	%.						99	100	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2068819

QC Batch: 511688 | Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 | Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2068819015

METHOD BLANK: 2095107 | Matrix: Water
Associated Lab Samples: 2068819015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/24/18 19:25	

LABORATORY CONTROL SAMPLE: 2095108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.3	106	90-110	

MATRIX SPIKE SAMPLE: 2095111

Parameter	Units	60262254002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	139	50	199	120	80-120	

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2068819

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City
PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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St. Rose, LA 70087
(504)469-0333

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2068819

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2068819001	**TB-20180108**	EPA 5030B/8260	99295		
2068819002	**EB-20180108**	EPA 5030B/8260	99295		
2068819003	**FB-20180108**	EPA 5030B/8260	99295		
2068819004	**MW-1C-2**	EPA 5030B/8260	99295		
2068819005	**MW-1C-3**	EPA 5030B/8260	99295		
2068819006	**MW-1C-4**	EPA 5030B/8260	99295		
2068819007	**EB-20180109**	EPA 5030B/8260	99295		
2068819008	**FB-20180109**	EPA 5030B/8260	99295		
2068819009	**USGS-TW-A2**	EPA 5030B/8260	99295		
2068819010	**USGS-TW-A1**	EPA 5030B/8260	99295		
2068819011	**GWDUP003**	EPA 5030B/8260	99295		
2068819012	**RW-5**	EPA 5030B/8260	99295		
2068819013	**EB-20180110**	EPA 5030B/8260	99295		
2068819014	**FB-20180110**	EPA 5030B/8260	99295		
2068819015	**FMW-6-90**	EPA 5030B/8260	99295		
2068819016	**MW-2**	EPA 5030B/8260	99295		
2068819017	**MW-4C-2**	EPA 5030B/8260	99295		
2068819018	**MW-4C-4**	EPA 5030B/8260	99295		
2068819015	**FMW-6-90**	EPA 300.0	511688		

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Pace Analytical

CHAIN-OF-C

The Chain-of-Cust

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ted accurately.

WO# : 2068819

2068819

Page : 1 Of 2

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	TB-20180108	WT	G			01/08/18	LAB		2				2							X		
2	EB-20180108	WT	G			01/08/18	0840		3				3						X			
3	FB-20180108	WT	G			01/08/18	1020		3				3						X			
4	MW-1C-2	WT	G			01/08/18	1026		3				3						X			
5	MW-1C-3	WT	G			01/08/18	1204		3				3						X			
6	MW-1C-4	WT	G			01/08/18	1255		3				3						X			
7	EB-20180109	WT	G			01/09/18	0955		3				3						X			
8	FB-20180109	WT	G			01/09/18	0918		3				3						X			
9	USGS-TW-A2	WT	G			01/09/18	1118		3				3						X			
10	USGS-TW-A1	WT	G			01/09/18	1254		3				3						X			
11	DUP003	WT	G			01/09/18			3				3						X			
12	RW-5	WT	G			01/09/18	1324		3				3						X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	01/10/18	1614	[signature] / Pace	1-10-18	16:14	
				FedEx			
	FedEx	1/13/18	840	[signature] / Pace	1/13/18	840	1.9 1.4 1.2

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Andrés Colon
SIGNATURE of SAMPLER:	[signature]
DATE Signed:	01 / 10 / 18

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	Y	Y

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

Requested Analysis Filtered (Y/N):

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	DI H2O	Chloride	Residual Chlorine (Y/N)
1	RW-5 (MS)	WT	G			01/09/18	1324		3				3					X				
2	RW-5 (MSD)	WT	G			01/09/18	1324		3				3					X				
3	EB-20180110	WT	G			01/10/18	0945		3				3					X				
4	FB-20180110	WT	G			01/10/18	0913		3				3					X				
5	FMW-6-90	WT	G			01/10/18	1030		4	1			3					X			X	
6	MW-2	WT	G			01/10/18	1126		3				3					X				
7	MW-4C-2	WT	G			01/10/18	1228		3				3					X				
8	MW-4C-4	WT	G			01/10/18	1311		3				3					X				
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	01/10/18	1614	[signature] / Pace	1-10-18	16:14	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 01/10/18

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon

Prc

WO#: 2068819

PM: CJM Due Date: 01/29/18
CLIENT: 20-CHEV-ARC

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☒Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☒ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 01-13-18 MA

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐Yes	☐No	☒N/A	1	
Chain of Custody Present:	☒Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6	
Sufficient Volume:	☒Yes	☐No	☐N/A	7	
Correct Containers Used:	☒Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9	
Sample Labels match COC:	☒Yes	☐No	☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☒N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14	
Trip Blank Present:	☒Yes	☐No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: * Direct Ship from Puerto Rico

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

January 22, 2018

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2069066

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on January 18, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2069066

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2069066

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2069066001	**TB-20180116**	Water	01/16/18 00:00	01/18/18 12:25
2069066002	**EB-20180116**	Water	01/16/18 08:05	01/18/18 12:25
2069066003	**FB-20180116**	Water	01/16/18 08:50	01/18/18 12:25
2069066004	**MW-4C-1BR**	Water	01/16/18 10:09	01/18/18 12:25
2069066005	**MW-4C-3**	Water	01/16/18 11:14	01/18/18 12:25
2069066006	**RW-3**	Water	01/16/18 11:57	01/18/18 12:25
2069066007	**GWDUP004**	Water	01/16/18 00:00	01/18/18 12:25
2069066008	**RW-1**	Water	01/16/18 12:18	01/18/18 12:25

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2069066

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2069066001	**TB-20180116**	EPA 5030B/8260	GEM	56	PASI-N
2069066002	**EB-20180116**	EPA 5030B/8260	GEM	56	PASI-N
2069066003	**FB-20180116**	EPA 5030B/8260	GEM	56	PASI-N
2069066004	**MW-4C-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2069066005	**MW-4C-3**	EPA 5030B/8260	GEM	56	PASI-N
2069066006	**RW-3**	EPA 5030B/8260	GEM	56	PASI-N
2069066007	**GWDUP004**	EPA 5030B/8260	GEM	56	PASI-N
2069066008	**RW-1**	EPA 5030B/8260	GEM	56	PASI-N

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2069066

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: January 22, 2018

General Information:
8 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 99442

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2069066008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 428461)
  - 1,1,2-Trichlorotrifluoroethane
  - Haloether 229
- MSD (Lab ID: 428462)
  - 1,1,2-Trichlorotrifluoroethane

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: TB-20180116 **Lab ID: 2069066001** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 13:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 13:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 13:07	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 13:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 13:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 13:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 13:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 13:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 13:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 13:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 13:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 13:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 13:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 13:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 13:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 13:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 13:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 13:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 13:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 406	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 421	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 427	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 428	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 508	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 528	ND	ug/L	1.0	1		01/19/18 13:07		
Halomar	ND	ug/L	1.0	1		01/19/18 13:07		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 13:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 13:07		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 13:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 13:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 13:07	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 13:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 13:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 13:07	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 13:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 13:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: TB-20180116 **Lab ID: 2069066001** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 13:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 13:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 13:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 13:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 13:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 13:07	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/19/18 13:07	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/19/18 13:07	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/19/18 13:07	1868-53-7	

Sample: EB-20180116 **Lab ID: 2069066002** Collected: 01/16/18 08:05 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 13:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 13:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 13:25	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 13:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 13:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 13:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 13:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 13:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 13:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 13:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 13:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 13:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 13:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 13:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 13:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 13:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 13:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 13:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 13:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 406	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 421	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 427	ND	ug/L	1.0	1		01/19/18 13:25		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: EB-20180116 **Lab ID: 2069066002** Collected: 01/16/18 08:05 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 508	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 528	ND	ug/L	1.0	1		01/19/18 13:25		
Halomar	ND	ug/L	1.0	1		01/19/18 13:25		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 13:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 13:25		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 13:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 13:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 13:25	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 13:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 13:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 13:25	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 13:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 13:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 13:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 13:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 13:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 13:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 13:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 13:25	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/19/18 13:25	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/19/18 13:25	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/19/18 13:25	1868-53-7	

Sample: FB-20180116 **Lab ID: 2069066003** Collected: 01/16/18 08:50 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 13:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 13:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 13:43	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 13:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 13:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 13:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 13:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 13:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 13:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 13:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 13:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 13:43	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: FB-20180116 **Lab ID: 2069066003** Collected: 01/16/18 08:50 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/19/18 13:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 13:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 13:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 13:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 13:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 13:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 406	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 421	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 427	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 428	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 508	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 528	ND	ug/L	1.0	1		01/19/18 13:43		
Halomar	ND	ug/L	1.0	1		01/19/18 13:43		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 13:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 13:43		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 13:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 13:43	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 13:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 13:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 13:43	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 13:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 13:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 13:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 13:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 13:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 13:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 13:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 13:43	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/19/18 13:43	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		01/19/18 13:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/19/18 13:43	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: MW-4C-1BR **Lab ID: 2069066004** Collected: 01/16/18 10:09 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:00	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:00	10061-02-6	
Enflurane	**4.1**	ug/L	1.0	1		01/19/18 14:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:00	100-41-4	
Haloether 229	**7.6**	ug/L	1.0	1		01/19/18 14:00		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 508	**9.3**	ug/L	1.0	1		01/19/18 14:00		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:00		
Halomar	**1.4**	ug/L	1.0	1		01/19/18 14:00		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:00	591-78-6	
Isoflurane	**97.8**	ug/L	1.0	1		01/19/18 14:00		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:00	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 14:00	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:00	108-88-3	
Total Haloether	**120**	ug/L	1.0	1		01/19/18 14:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: MW-4C-1BR **Lab ID: 2069066004** Collected: 01/16/18 10:09 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:00	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/19/18 14:00	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/19/18 14:00	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/19/18 14:00	1868-53-7	

Sample: MW-4C-3 **Lab ID: 2069066005** Collected: 01/16/18 11:14 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:18	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 14:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:18	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:18		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: MW-4C-3 **Lab ID: 2069066005** Collected: 01/16/18 11:14 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 508	**3.1**	ug/L	1.0	1		01/19/18 14:18		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:18		
Halomar	ND	ug/L	1.0	1		01/19/18 14:18		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:18	591-78-6	
Isoflurane	**2.5**	ug/L	1.0	1		01/19/18 14:18		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:18	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:18	79-34-5	
Tetrachloroethene	**1.6**	ug/L	1.0	1		01/19/18 14:18	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:18	108-88-3	
Total Haloether	**5.7**	ug/L	1.0	1		01/19/18 14:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:18	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/19/18 14:18	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/19/18 14:18	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/19/18 14:18	1868-53-7	

Sample: RW-3 **Lab ID: 2069066006** Collected: 01/16/18 11:57 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:36	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:36	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:36	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: RW-3 **Lab ID: 2069066006** Collected: 01/16/18 11:57 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 14:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 508	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:36		
Halomar	ND	ug/L	1.0	1		01/19/18 14:36		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:36	591-78-6	
Isoflurane	**1.1**	ug/L	1.0	1		01/19/18 14:36		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:36	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:36	79-34-5	
Tetrachloroethene	**1.7**	ug/L	1.0	1		01/19/18 14:36	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:36	108-88-3	
Total Haloether	**1.1**	ug/L	1.0	1		01/19/18 14:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:36	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:36	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/19/18 14:36	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/19/18 14:36	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/19/18 14:36	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: GWDUP004 **Lab ID: 2069066007** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:54	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 14:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 508	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:54		
Halomar	ND	ug/L	1.0	1		01/19/18 14:54		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:54	591-78-6	
Isoflurane	**1.5**	ug/L	1.0	1		01/19/18 14:54		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:54	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:54	79-34-5	
Tetrachloroethene	**1.8**	ug/L	1.0	1		01/19/18 14:54	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:54	108-88-3	
Total Haloether	**1.5**	ug/L	1.0	1		01/19/18 14:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: GWDUP004 **Lab ID: 2069066007** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:54	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/19/18 14:54	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		01/19/18 14:54	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/19/18 14:54	1868-53-7	

Sample: RW-1 **Lab ID: 2069066008** Collected: 01/16/18 12:18 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 12:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 12:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 12:49	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 12:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 12:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 12:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 12:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 12:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 12:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 12:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 12:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 12:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 12:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 12:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 12:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 12:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 12:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 12:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 12:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 12:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 12:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 12:49		M1
Haloether 406	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 421	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 427	ND	ug/L	1.0	1		01/19/18 12:49		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: RW-1 **Lab ID: 2069066008** Collected: 01/16/18 12:18 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 508	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 528	ND	ug/L	1.0	1		01/19/18 12:49		
Halomar	ND	ug/L	1.0	1		01/19/18 12:49		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 12:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 12:49		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 12:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 12:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 12:49	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 12:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 12:49	79-34-5	
Tetrachloroethene	**1.3**	ug/L	1.0	1		01/19/18 12:49	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 12:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 12:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 12:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 12:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 12:49	76-13-1	M1
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 12:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 12:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 12:49	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/19/18 12:49	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/19/18 12:49	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/19/18 12:49	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069066

QC Batch: 99442 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2069066001, 2069066002, 2069066003, 2069066004, 2069066005, 2069066006, 2069066007, 2069066008

METHOD BLANK: 428459 | Matrix: Water
Associated Lab Samples: 2069066001, 2069066002, 2069066003, 2069066004, 2069066005, 2069066006, 2069066007, 2069066008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/19/18 10:28	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/19/18 10:28	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/19/18 10:28	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	01/19/18 10:28	
1,1-Dichloroethane	ug/L	ND	1.0	01/19/18 10:28	
1,1-Dichloroethene	ug/L	ND	1.0	01/19/18 10:28	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/19/18 10:28	
1,2-Dichloroethane	ug/L	ND	1.0	01/19/18 10:28	
1,2-Dichloropropane	ug/L	ND	1.0	01/19/18 10:28	
2-Butanone (MEK)	ug/L	ND	2.0	01/19/18 10:28	
2-Hexanone	ug/L	ND	2.0	01/19/18 10:28	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	01/19/18 10:28	
Acetone	ug/L	ND	4.0	01/19/18 10:28	
Acrolein	ug/L	ND	8.0	01/19/18 10:28	
Acrylonitrile	ug/L	ND	4.0	01/19/18 10:28	
Benzene	ug/L	ND	1.0	01/19/18 10:28	
Bromodichloromethane	ug/L	ND	1.0	01/19/18 10:28	
Bromoform	ug/L	ND	1.0	01/19/18 10:28	
Bromomethane	ug/L	ND	1.0	01/19/18 10:28	
Carbon disulfide	ug/L	ND	1.0	01/19/18 10:28	
Carbon tetrachloride	ug/L	ND	1.0	01/19/18 10:28	
Chlorobenzene	ug/L	ND	1.0	01/19/18 10:28	
Chloroethane	ug/L	ND	1.0	01/19/18 10:28	
Chloroform	ug/L	ND	1.0	01/19/18 10:28	
Chloromethane	ug/L	ND	1.0	01/19/18 10:28	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/19/18 10:28	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/19/18 10:28	
Dibromochloromethane	ug/L	ND	1.0	01/19/18 10:28	
Dibromomethane	ug/L	ND	1.0	01/19/18 10:28	
Enflurane	ug/L	ND	1.0	01/19/18 10:28	
Ethylbenzene	ug/L	ND	1.0	01/19/18 10:28	
Haloether 229	ug/L	ND	1.0	01/19/18 10:28	
Haloether 406	ug/L	ND	1.0	01/19/18 10:28	
Haloether 421	ug/L	ND	1.0	01/19/18 10:28	
Haloether 427	ug/L	ND	1.0	01/19/18 10:28	
Haloether 428	ug/L	ND	1.0	01/19/18 10:28	
Haloether 508	ug/L	ND	1.0	01/19/18 10:28	
Haloether 528	ug/L	ND	1.0	01/19/18 10:28	
Halomar	ug/L	ND	1.0	01/19/18 10:28	
Isoflurane	ug/L	ND	1.0	01/19/18 10:28	
m&p-Xylene	ug/L	ND	2.0	01/19/18 10:28	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069066

METHOD BLANK: 428459 Matrix: Water

Associated Lab Samples: 2069066001, 2069066002, 2069066003, 2069066004, 2069066005, 2069066006, 2069066007, 2069066008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methoxyflurane	ug/L	ND	1.0	01/19/18 10:28	
Methylene Chloride	ug/L	ND	5.0	01/19/18 10:28	
o-Xylene	ug/L	ND	1.0	01/19/18 10:28	
Styrene	ug/L	ND	1.0	01/19/18 10:28	
Tetrachloroethene	ug/L	ND	1.0	01/19/18 10:28	
Toluene	ug/L	ND	1.0	01/19/18 10:28	
Total Haloether	ug/L	ND	1.0	01/19/18 10:28	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/19/18 10:28	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/19/18 10:28	
Trichloroethene	ug/L	ND	1.0	01/19/18 10:28	
Trichlorofluoromethane	ug/L	ND	1.0	01/19/18 10:28	
Vinyl chloride	ug/L	ND	1.0	01/19/18 10:28	
4-Bromofluorobenzene (S)	%.	100	68-124	01/19/18 10:28	
Dibromofluoromethane (S)	%.	101	72-126	01/19/18 10:28	
Toluene-d8 (S)	%.	100	79-119	01/19/18 10:28	

LABORATORY CONTROL SAMPLE: 428460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.7	113	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	52.2	104	15-179	
1,1,2-Trichloroethane	ug/L	50	49.9	100	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	56.9	114	38-121	
1,1-Dichloroethane	ug/L	50	54.3	109	63-129	
1,1-Dichloroethene	ug/L	50	55.6	111	51-139	
1,2,3-Trichloropropane	ug/L	50	50.3	101	13-187	
1,2-Dichloroethane	ug/L	50	50.6	101	57-148	
1,2-Dichloropropane	ug/L	50	51.8	104	66-128	
2-Butanone (MEK)	ug/L	50	54.8	110	32-183	
2-Hexanone	ug/L	50	49.8	100	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	51.3	103	26-171	
Acetone	ug/L	50	57.8	116	22-165	
Acrolein	ug/L	50	46.2	92	10-131	
Acrylonitrile	ug/L	50	51.8	104	18-149	
Benzene	ug/L	50	48.8	98	62-131	
Bromodichloromethane	ug/L	50	53.1	106	69-132	
Bromoform	ug/L	50	45.7	91	35-166	
Bromomethane	ug/L	50	41.6	83	34-158	
Carbon disulfide	ug/L	50	56.0	112	31-128	
Carbon tetrachloride	ug/L	50	52.9	106	54-144	
Chlorobenzene	ug/L	50	51.2	102	70-127	
Chloroethane	ug/L	50	43.1	86	17-195	
Chloroform	ug/L	50	52.7	105	73-134	
Chloromethane	ug/L	50	28.6	57	17-153	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069066

LABORATORY CONTROL SAMPLE: 428460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	50.2	100	68-129	
cis-1,3-Dichloropropene	ug/L	50	53.6	107	72-138	
Dibromochloromethane	ug/L	50	50.7	101	49-146	
Dibromomethane	ug/L	50	50.9	102	56-145	
Enflurane	ug/L	50	56.4	113	56-135	
Ethylbenzene	ug/L	50	49.4	99	66-126	
Haloether 229	ug/L	50	56.2	112	62-123	
Haloether 406	ug/L	50	51.3	103	62-134	
Haloether 421	ug/L	50	42.2	84	70-128	
Haloether 427	ug/L	50	51.3	103	69-153	
Haloether 428	ug/L	50	48.5	97	70-134	
Haloether 508	ug/L	50	51.3	103	52-139	
Haloether 528	ug/L	50	42.2	84	48-157	
Halomar	ug/L	50	48.6	97	62-128	
Isoflurane	ug/L	50	56.9	114	61-132	
m&p-Xylene	ug/L	100	98.9	99	65-129	
Methoxyflurane	ug/L	50	41.3	83	72-124	
Methylene Chloride	ug/L	50	51.8	104	46-168	
o-Xylene	ug/L	50	48.8	98	65-124	
Styrene	ug/L	50	51.4	103	72-133	
Tetrachloroethene	ug/L	50	54.6	109	46-157	
Toluene	ug/L	50	48.9	98	69-126	
Total Haloether	ug/L		546			
trans-1,2-Dichloroethene	ug/L	50	55.9	112	60-129	
trans-1,3-Dichloropropene	ug/L	50	51.8	104	59-149	
Trichloroethene	ug/L	50	49.7	99	67-132	
Trichlorofluoromethane	ug/L	50	54.5	109	39-171	
Vinyl chloride	ug/L	50	38.0	76	27-149	
4-Bromofluorobenzene (S)	%.			99	68-124	
Dibromofluoromethane (S)	%.			102	72-126	
Toluene-d8 (S)	%.			100	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 428461 428462

Parameter	Units	2069066008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	58.8	53.7	118	107	54-137	9	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	51.1	49.3	102	99	15-187	4	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	46.3	45.7	93	91	59-148	1	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	60.9	60.6	122	121	40-117	0	20	M1
1,1-Dichloroethane	ug/L	ND	50	50	55.1	50.6	110	101	59-133	9	20	
1,1-Dichloroethene	ug/L	ND	50	50	54.2	54.9	108	110	44-146	1	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	45.5	47.3	91	95	14-199	4	20	
1,2-Dichloroethane	ug/L	ND	50	50	48.8	47.5	98	95	56-154	3	20	
1,2-Dichloropropane	ug/L	ND	50	50	50.9	48.7	102	97	62-135	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069066

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 428461 428462

Parameter	Units	2069066008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Butanone (MEK)	ug/L	ND	50	50	47.3	45.1	95	90	20-205	5	20	
2-Hexanone	ug/L	ND	50	50	50.4	46.7	101	93	25-189	8	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	49.1	49.4	98	99	23-184	1	20	
Acetone	ug/L	ND	50	50	48.0	44.4	96	89	11-217	8	20	
Acrolein	ug/L	ND	50	50	45.9	45.7	92	91	10-142	0	20	
Acrylonitrile	ug/L	ND	50	50	48.6	46.4	97	93	20-164	5	20	
Benzene	ug/L	ND	50	50	50.6	48.1	101	96	52-141	5	20	
Bromodichloromethane	ug/L	ND	50	50	52.6	51.2	105	102	70-134	3	20	
Bromoform	ug/L	ND	50	50	46.2	44.2	92	88	37-171	4	20	
Bromomethane	ug/L	ND	50	50	44.7	41.1	89	82	34-155	8	20	
Carbon disulfide	ug/L	ND	50	50	58.5	54.5	117	109	28-130	7	20	
Carbon tetrachloride	ug/L	ND	50	50	55.5	51.4	111	103	48-146	8	20	
Chlorobenzene	ug/L	ND	50	50	53.1	50.6	106	101	67-129	5	20	
Chloroethane	ug/L	ND	50	50	46.6	43.7	93	87	12-192	6	20	
Chloroform	ug/L	ND	50	50	52.6	48.6	105	97	66-143	8	20	
Chloromethane	ug/L	ND	50	50	29.7	27.0	59	54	14-155	10	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	51.4	47.7	103	95	56-141	8	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	52.2	51.3	104	103	70-139	2	20	
Dibromochloromethane	ug/L	ND	50	50	51.8	49.0	104	98	50-150	5	20	
Dibromomethane	ug/L	ND	50	50	50.0	48.2	100	96	58-153	4	20	
Enflurane	ug/L	ND	50	50	59.0	53.4	118	107	63-126	10	20	
Ethylbenzene	ug/L	ND	50	50	50.8	49.0	102	98	57-135	3	20	
Haloether 229	ug/L	ND	50	50	65.7	53.6	131	107	56-127	20	20	M1
Haloether 406	ug/L	ND	50	50	53.7	49.7	107	99	68-128	8	20	
Haloether 421	ug/L	ND	50	50	42.6	40.8	85	82	74-120	4	20	
Haloether 427	ug/L	ND	50	50	51.3	50.8	103	102	78-120	1	20	
Haloether 428	ug/L	ND	50	50	48.9	50.0	98	100	74-125	2	20	
Haloether 508	ug/L	ND	50	50	54.9	47.2	110	94	28-156	15	20	
Haloether 528	ug/L	ND	50	50	42.9	39.6	86	79	45-142	8	20	
Halomar	ug/L	ND	50	50	50.4	46.8	101	94	67-123	7	20	
Isoflurane	ug/L	ND	50	50	58.1	53.5	116	107	45-140	8	20	
m&p-Xylene	ug/L	ND	100	100	101	99.0	101	99	56-136	2	20	
Methoxyflurane	ug/L	ND	50	50	41.7	40.7	83	81	75-119	3	20	
Methylene Chloride	ug/L	ND	50	50	52.4	47.5	105	95	45-166	10	20	
o-Xylene	ug/L	ND	50	50	50.0	48.2	100	96	57-133	4	20	
Styrene	ug/L	ND	50	50	50.7	50.6	101	101	58-144	0	20	
Tetrachloroethene	ug/L	1.3	50	50	58.8	58.6	115	115	48-143	0	20	
Toluene	ug/L	ND	50	50	50.1	48.4	100	97	59-136	4	20	
Total Haloether	ug/L	ND			569	526				8		
trans-1,2-Dichloroethene	ug/L	ND	50	50	57.1	52.4	114	105	57-132	9	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	50.6	48.7	101	97	59-154	4	20	
Trichloroethene	ug/L	ND	50	50	53.4	49.2	106	98	58-140	8	20	
Trichlorofluoromethane	ug/L	ND	50	50	60.4	52.7	121	105	24-175	14	20	
Vinyl chloride	ug/L	ND	50	50	43.1	36.5	86	73	21-150	17	20	
4-Bromofluorobenzene (S)	%.						100	96	68-124			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069066

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 428461 428462

Parameter	Units	2069066008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%.						103	98	72-126			
Toluene-d8 (S)	%.						100	100	79-119			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2069066

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2069066

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2069066001	**TB-20180116**	EPA 5030B/8260	99442		
2069066002	**EB-20180116**	EPA 5030B/8260	99442		
2069066003	**FB-20180116**	EPA 5030B/8260	99442		
2069066004	**MW-4C-1BR**	EPA 5030B/8260	99442		
2069066005	**MW-4C-3**	EPA 5030B/8260	99442		
2069066006	**RW-3**	EPA 5030B/8260	99442		
2069066007	**GWDUP004**	EPA 5030B/8260	99442		
2069066008	**RW-1**	EPA 5030B/8260	99442		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO# : 2069066

2069066

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
Rd 165 KM 1.2, Guaynabo, PR 00968	
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	TB-20180116	WT	G			01/16/18	LAB		2				2						X		
2	EB-20180116	WT	G			01/16/18	0905		3				3					X			
3	FB-20180116	WT	G			01/16/18	0950		3				3					X			
4	MW-4C-1BR	WT	G			01/16/18	1009		3				3					X			
5	MW-4C-3	WT	G			01/16/18	1114		3				3					X			
6	RW-3	WT	G			01/16/18	1157		3				3					X			
7	GWDUPOD4	WT	G			01/16/18	/		3				3					X			
8	RW-1	WT	G			01/16/18	1218		3				3					X			
9	RW-1 (MS)	WT	G			01/16/18	1218		3				3					X			
10	RW-1 (MSD)	WT	G			01/16/18	1218		3				3					X			
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andres Colom / Arcadis	01/16/18	1456		1-16-18	1456	
		1-16-18	17:00	FedEx			
	FedEx	1/18/18	01225		1/18/18	1225	1.8 4 4 4

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Andrés Colom
SIGNATURE of SAMPLER:	
DATE Signed:	01/16/18

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 2069066

PM: CJM Due Date: 02/01/18
CLIENT: 20-CHEV-ARC

Pace Analytical

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St. Rose, LA 70087

Sample Condition Upon Recei

Project #: 20

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☒ Yes ☐ No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☒ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 1/18/18 RC

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐ Yes	☒ No	☐ N/A	1	
Chain of Custody Present:	☒ Yes	☐ No	☐ N/A	2	
Chain of Custody Complete:	☒ Yes	☐ No	☐ N/A	3	
Chain of Custody Relinquished:	☒ Yes	☐ No	☐ N/A	4	
Sampler Name & Signature on COC:	☒ Yes	☐ No	☐ N/A	5	
Samples Arrived within Hold Time:	☒ Yes	☐ No	☐ N/A	6	
Sufficient Volume:	☒ Yes	☐ No	☐ N/A	7	
Correct Containers Used:	☒ Yes	☐ No	☐ N/A	8	
Filtered vol. Rec. for Diss. tests	☐ Yes	☐ No	☒ N/A	9	
Sample Labels match COC:	☒ Yes	☐ No	☐ N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☒ Yes	☐ No	☐ N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐ Yes	☐ No	☒ N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐ Yes	☐ No	☒ N/A	13	If No, was preserative added? ☐ Yes ☐ No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☒ Yes	☐ No	☐ N/A	14	Trip Blank
Trip Blank Present:	☒ Yes	☐ No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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January 25, 2018

David Howard
ARCADIS
410 North 44th St.
Suite 1000
Phoenix, AZ 85008

RE: Project: 2SAR2017
Pace Project No.: 2069189

Dear David Howard:
Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Craig McCollum
craig.mccollum@pacelabs.com
504-305-3618
Project Manager

Enclosures

cc: Janisse Diaz, Arcadis
Gisela Hernandez Rivera, Arcadis
Elvin Varela, ARCADIS

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CERTIFICATIONS

Project: 2SAR2017
Pace Project No.: 2069189

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119
Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 2SAR2017
Pace Project No.: 2069189

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2069189001	**TB-20180111**	Water	01/11/18 00:00	01/20/18 09:45
2069189002	**EB-20180111**	Water	01/11/18 08:00	01/20/18 09:45
2069189003	**FB-20180111**	Water	01/11/18 10:25	01/20/18 09:45
2069189004	**MW-1B-3**	Water	01/11/18 11:01	01/20/18 09:45
2069189005	**MW-1B-2**	Water	01/11/18 11:29	01/20/18 09:45
2069189006	**PCMW-1**	Water	01/11/18 12:19	01/20/18 09:45
2069189007	**ES-19**	Water	01/11/18 13:10	01/20/18 09:45
2069189008	**AWPI-MW-1**	Water	01/11/18 13:58	01/20/18 09:45
2069189009	**AWPI-MW-2**	Water	01/11/18 14:35	01/20/18 09:45
2069189010	**EB-20180112**	Water	01/12/18 08:20	01/20/18 09:45
2069189011	**FB-20180112**	Water	01/12/18 09:30	01/20/18 09:45
2069189012	**MW-4D-1BR**	Water	01/12/18 10:09	01/20/18 09:45
2069189013	**MW-4D-4**	Water	01/12/18 11:01	01/20/18 09:45
2069189014	**MW-4D-2**	Water	01/12/18 12:01	01/20/18 09:45
2069189015	**MW-4D-3**	Water	01/12/18 13:01	01/20/18 09:45

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SAMPLE ANALYTE COUNT

Project: 2SAR2017
Pace Project No.: 2069189

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2069189001	**TB-20180111**	EPA 5030B/8260	GEM	56	PASI-N
2069189002	**EB-20180111**	EPA 5030B/8260	GEM	56	PASI-N
2069189003	**FB-20180111**	EPA 5030B/8260	GEM	56	PASI-N
2069189004	**MW-1B-3**	EPA 5030B/8260	GEM	56	PASI-N
2069189005	**MW-1B-2**	EPA 5030B/8260	GEM	56	PASI-N
2069189006	**PCMW-1**	EPA 5030B/8260	GEM	56	PASI-N
2069189007	**ES-19**	EPA 5030B/8260	GEM	56	PASI-N
2069189008	**AWPI-MW-1**	EPA 5030B/8260	GEM	56	PASI-N
2069189009	**AWPI-MW-2**	EPA 5030B/8260	GEM	56	PASI-N
2069189010	**EB-20180112**	EPA 5030B/8260	GEM	56	PASI-N
2069189011	**FB-20180112**	EPA 5030B/8260	GEM	56	PASI-N
2069189012	**MW-4D-1BR**	EPA 5030B/8260	GEM	56	PASI-N
2069189013	**MW-4D-4**	EPA 5030B/8260	GEM	56	PASI-N
2069189014	**MW-4D-2**	EPA 5030B/8260	GEM	56	PASI-N
2069189015	**MW-4D-3**	EPA 5030B/8260	GEM	56	PASI-N

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PROJECT NARRATIVE

Project: 2SAR2017
Pace Project No.: 2069189

Method: **EPA 5030B/8260**
Description: 8260 MSV HALOETHERS
Client: ARCADIS
Date: January 25, 2018

General Information:
15 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 99687

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 2069189004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 429544)
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 429545)
  - 1,1,2-Trichlorotrifluoroethane

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: TB-20180111 **Lab ID: 2069189001** Collected: 01/11/18 00:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 16:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 16:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 16:25	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 16:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 16:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 16:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 16:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 16:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 16:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 16:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 16:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 16:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 16:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 16:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 16:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 16:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 16:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 16:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 16:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 406	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 421	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 427	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 428	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 508	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 528	ND	ug/L	1.0	1		01/23/18 16:25		
Halomar	ND	ug/L	1.0	1		01/23/18 16:25		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 16:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 16:25		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 16:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 16:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 16:25	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 16:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 16:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 16:25	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 16:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 16:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	79-01-6	

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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: TB-20180111 **Lab ID: 2069189001** Collected: 01/11/18 00:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 16:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 16:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 16:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 16:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 16:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 16:25	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 16:25	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/23/18 16:25	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/23/18 16:25	1868-53-7	

Sample: EB-20180111 **Lab ID: 2069189002** Collected: 01/11/18 08:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**11.3**	ug/L	4.0	1		01/23/18 16:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 16:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 16:43	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 16:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 16:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 16:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 16:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 16:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 16:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 16:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 16:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 16:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 16:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 16:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 16:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 16:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 16:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 16:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 16:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 406	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 421	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 427	ND	ug/L	1.0	1		01/23/18 16:43		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: EB-20180111 **Lab ID: 2069189002** Collected: 01/11/18 08:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 508	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 528	ND	ug/L	1.0	1		01/23/18 16:43		
Halomar	ND	ug/L	1.0	1		01/23/18 16:43		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 16:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 16:43		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 16:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 16:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 16:43	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 16:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 16:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 16:43	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 16:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 16:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 16:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 16:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 16:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 16:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 16:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 16:43	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/23/18 16:43	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		01/23/18 16:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 16:43	1868-53-7	

Sample: FB-20180111 **Lab ID: 2069189003** Collected: 01/11/18 10:25 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 17:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 17:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 17:01	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 17:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 17:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 17:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 17:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 17:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 17:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 17:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 17:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 17:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 17:01	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: FB-20180111 **Lab ID: 2069189003** Collected: 01/11/18 10:25 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 17:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 17:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 17:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 17:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 17:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 17:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 17:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 17:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 406	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 421	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 427	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 428	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 508	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 528	ND	ug/L	1.0	1		01/23/18 17:01		
Halomar	ND	ug/L	1.0	1		01/23/18 17:01		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 17:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 17:01		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 17:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 17:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 17:01	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 17:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 17:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 17:01	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 17:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 17:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 17:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 17:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 17:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 17:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 17:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 17:01	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/23/18 17:01	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 17:01	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/23/18 17:01	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-1B-3 **Lab ID: 2069189004** Collected: 01/11/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 16:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 16:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 16:07	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 16:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 16:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 16:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 16:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 16:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 16:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 16:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 16:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 16:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 16:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 16:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 16:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 16:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 16:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 16:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 16:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 406	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 421	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 427	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 428	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 508	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 528	ND	ug/L	1.0	1		01/23/18 16:07		
Halomar	ND	ug/L	1.0	1		01/23/18 16:07		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 16:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 16:07		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 16:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 16:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 16:07	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 16:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 16:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 16:07	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 16:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 16:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-1B-3 **Lab ID: 2069189004** Collected: 01/11/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 16:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 16:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 16:07	76-13-1	M1
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 16:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 16:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 16:07	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 16:07	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		01/23/18 16:07	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/23/18 16:07	1868-53-7	

Sample: MW-1B-2 **Lab ID: 2069189005** Collected: 01/11/18 11:29 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 18:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 18:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 18:12	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 18:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 18:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 18:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 18:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 18:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 18:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 18:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 18:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 18:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 18:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 18:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 18:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 18:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 18:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 18:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 18:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 406	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 421	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 427	ND	ug/L	1.0	1		01/23/18 18:12		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-1B-2 **Lab ID: 2069189005** Collected: 01/11/18 11:29 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 508	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 528	ND	ug/L	1.0	1		01/23/18 18:12		
Halomar	ND	ug/L	1.0	1		01/23/18 18:12		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 18:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 18:12		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 18:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 18:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 18:12	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 18:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 18:12	79-34-5	
Tetrachloroethene	**1.3**	ug/L	1.0	1		01/23/18 18:12	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 18:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 18:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 18:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 18:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 18:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 18:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 18:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 18:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 18:12	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/23/18 18:12	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/23/18 18:12	1868-53-7	

Sample: PCMW-1 **Lab ID: 2069189006** Collected: 01/11/18 12:19 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 18:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 18:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 18:30	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 18:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 18:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 18:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 18:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 18:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 18:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 18:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 18:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 18:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 18:30	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: PCMW-1 **Lab ID: 2069189006** Collected: 01/11/18 12:19 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 18:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 18:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 18:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:30	75-35-4	
cis-1,2-Dichloroethene	**4.2**	ug/L	1.0	1		01/23/18 18:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 18:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 18:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 18:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 406	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 421	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 427	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 428	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 508	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 528	ND	ug/L	1.0	1		01/23/18 18:30		
Halomar	ND	ug/L	1.0	1		01/23/18 18:30		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 18:30	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 18:30		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 18:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 18:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 18:30	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 18:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 18:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 18:30	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 18:30	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 18:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 18:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 18:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 18:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 18:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 18:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 18:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 18:30	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 18:30	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 18:30	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 18:30	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: ES-19 **Lab ID: 2069189007** Collected: 01/11/18 13:10 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 18:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 18:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 18:48	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 18:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 18:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 18:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 18:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 18:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 18:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 18:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 18:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 18:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 18:48	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 18:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 18:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 18:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 18:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:48	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 18:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 18:48	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 406	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 421	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 427	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 428	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 508	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 528	ND	ug/L	1.0	1		01/23/18 18:48		
Halomar	ND	ug/L	1.0	1		01/23/18 18:48		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 18:48	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 18:48		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 18:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 18:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 18:48	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 18:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 18:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 18:48	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 18:48	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 18:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: ES-19 **Lab ID: 2069189007** Collected: 01/11/18 13:10 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 18:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 18:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 18:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 18:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 18:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 18:48	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 18:48	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/23/18 18:48	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/23/18 18:48	1868-53-7	

Sample: AWPI-MW-1 **Lab ID: 2069189008** Collected: 01/11/18 13:58 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 19:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 19:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:05	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:05		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: AWPI-MW-1 **Lab ID: 2069189008** Collected: 01/11/18 13:58 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:05		
Halomar	ND	ug/L	1.0	1		01/23/18 19:05		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:05		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:05	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:05	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		01/23/18 19:05	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:05	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:05	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 19:05	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/23/18 19:05	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/23/18 19:05	1868-53-7	

Sample: AWPI-MW-2 **Lab ID: 2069189009** Collected: 01/11/18 14:35 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.7**	ug/L	4.0	1		01/23/18 19:23	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 19:23	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:23	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:23	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:23	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:23	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:23	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:23	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:23	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: AWPI-MW-2 **Lab ID: 2069189009** Collected: 01/11/18 14:35 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:23	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:23	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:23	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:23	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:23	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:23		
Halomar	ND	ug/L	1.0	1		01/23/18 19:23		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:23	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:23		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:23	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:23	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:23	79-34-5	
Tetrachloroethene	**5.8**	ug/L	1.0	1		01/23/18 19:23	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:23	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:23		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:23	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:23	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:23	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:23	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:23	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 19:23	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/23/18 19:23	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 19:23	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: EB-20180112 **Lab ID: 2069189010** Collected: 01/12/18 08:20 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 19:41	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 19:41	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:41	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:41	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:41	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:41	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:41	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:41	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:41	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:41	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:41	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:41	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:41		
Halomar	ND	ug/L	1.0	1		01/23/18 19:41		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:41	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:41		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:41	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:41	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 19:41	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:41	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:41		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: EB-20180112 **Lab ID: 2069189010** Collected: 01/12/18 08:20 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:41	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:41	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:41	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:41	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 19:41	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/23/18 19:41	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 19:41	1868-53-7	

Sample: FB-20180112 **Lab ID: 2069189011** Collected: 01/12/18 09:30 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 19:59	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 19:59	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:59	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:59	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:59	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:59	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:59	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:59	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:59	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:59	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:59	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:59	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:59		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: FB-20180112 **Lab ID: 2069189011** Collected: 01/12/18 09:30 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:59		
Halomar	ND	ug/L	1.0	1		01/23/18 19:59		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:59	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:59		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:59	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:59	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 19:59	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:59	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:59		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:59	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:59	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:59	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:59	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 19:59	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 19:59	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/23/18 19:59	1868-53-7	

Sample: MW-4D-1BR **Lab ID: 2069189012** Collected: 01/12/18 10:09 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 20:17	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 20:17	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 20:17	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 20:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 20:17	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 20:17	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 20:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 20:17	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 20:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 20:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 20:17	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 20:17	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 20:17	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-1BR **Lab ID: 2069189012** Collected: 01/12/18 10:09 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 20:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 20:17	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 20:17	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 20:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:17	10061-02-6	
Enflurane	**2.1**	ug/L	1.0	1		01/23/18 20:17	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 20:17	100-41-4	
Haloether 229	**1.4**	ug/L	1.0	1		01/23/18 20:17		
Haloether 406	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 421	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 427	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 428	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 508	**8.0**	ug/L	1.0	1		01/23/18 20:17		
Haloether 528	ND	ug/L	1.0	1		01/23/18 20:17		
Halomar	**1.1**	ug/L	1.0	1		01/23/18 20:17		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 20:17	591-78-6	
Isoflurane	**10**	ug/L	1.0	1		01/23/18 20:17		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 20:17	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 20:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 20:17	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 20:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 20:17	79-34-5	
Tetrachloroethene	**1.0**	ug/L	1.0	1		01/23/18 20:17	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 20:17	108-88-3	
Total Haloether	**22.6**	ug/L	1.0	1		01/23/18 20:17		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 20:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 20:17	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 20:17	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 20:17	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 20:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 20:17	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 20:17	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/23/18 20:17	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/23/18 20:17	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-4 **Lab ID: 2069189013** Collected: 01/12/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 20:35	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 20:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 20:35	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 20:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 20:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 20:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 20:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 20:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 20:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 20:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 20:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 20:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 20:35	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 20:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 20:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 20:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 20:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 20:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 20:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 406	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 421	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 427	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 428	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 508	**3.1**	ug/L	1.0	1		01/23/18 20:35		
Haloether 528	ND	ug/L	1.0	1		01/23/18 20:35		
Halomar	ND	ug/L	1.0	1		01/23/18 20:35		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 20:35	591-78-6	
Isoflurane	**2.1**	ug/L	1.0	1		01/23/18 20:35		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 20:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 20:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 20:35	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 20:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 20:35	79-34-5	
Tetrachloroethene	**1.3**	ug/L	1.0	1		01/23/18 20:35	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 20:35	108-88-3	
Total Haloether	**5.2**	ug/L	1.0	1		01/23/18 20:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-4 **Lab ID: 2069189013** Collected: 01/12/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 20:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 20:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 20:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 20:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 20:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 20:35	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/23/18 20:35	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/23/18 20:35	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 20:35	1868-53-7	

Sample: MW-4D-2 **Lab ID: 2069189014** Collected: 01/12/18 12:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 20:52	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 20:52	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 20:52	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 20:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 20:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 20:52	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 20:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 20:52	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 20:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 20:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 20:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 20:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 20:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 20:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 20:52	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 20:52	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 20:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:52	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		01/23/18 20:52	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 20:52	100-41-4	
Haloether 229	**1.3**	ug/L	1.0	1		01/23/18 20:52		
Haloether 406	ND	ug/L	1.0	1		01/23/18 20:52		
Haloether 421	ND	ug/L	1.0	1		01/23/18 20:52		
Haloether 427	ND	ug/L	1.0	1		01/23/18 20:52		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-2 **Lab ID: 2069189014** Collected: 01/12/18 12:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 20:52		
Haloether 508	**3.8**	ug/L	1.0	1		01/23/18 20:52		
Haloether 528	ND	ug/L	1.0	1		01/23/18 20:52		
Halomar	ND	ug/L	1.0	1		01/23/18 20:52		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 20:52	591-78-6	
Isoflurane	**8.7**	ug/L	1.0	1		01/23/18 20:52		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 20:52	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 20:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 20:52	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 20:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 20:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 20:52	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 20:52	108-88-3	
Total Haloether	**15.2**	ug/L	1.0	1		01/23/18 20:52		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 20:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 20:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 20:52	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 20:52	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 20:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 20:52	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/23/18 20:52	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/23/18 20:52	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/23/18 20:52	1868-53-7	

Sample: MW-4D-3 **Lab ID: 2069189015** Collected: 01/12/18 13:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 21:10	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 21:10	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 21:10	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 21:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 21:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 21:10	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 21:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 21:10	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 21:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 21:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 21:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 21:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 21:10	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-3 **Lab ID: 2069189015** Collected: 01/12/18 13:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 21:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 21:10	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 21:10	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 21:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 21:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 21:10	10061-02-6	
Enflurane	**5.1**	ug/L	1.0	1		01/23/18 21:10	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 21:10	100-41-4	
Haloether 229	**6.8**	ug/L	1.0	1		01/23/18 21:10		
Haloether 406	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 421	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 427	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 428	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 508	**7.9**	ug/L	1.0	1		01/23/18 21:10		
Haloether 528	ND	ug/L	1.0	1		01/23/18 21:10		
Halomar	**1.4**	ug/L	1.0	1		01/23/18 21:10		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 21:10	591-78-6	
Isoflurane	**27.0**	ug/L	1.0	1		01/23/18 21:10		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 21:10	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 21:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 21:10	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 21:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 21:10	79-34-5	
Tetrachloroethene	**2.9**	ug/L	1.0	1		01/23/18 21:10	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 21:10	108-88-3	
Total Haloether	**48.1**	ug/L	1.0	1		01/23/18 21:10		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 21:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 21:10	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 21:10	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 21:10	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 21:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 21:10	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/23/18 21:10	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 21:10	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/23/18 21:10	1868-53-7	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069189

QC Batch: 99687 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV
Associated Lab Samples: 2069189001, 2069189002, 2069189003, 2069189004, 2069189005, 2069189006, 2069189007, 2069189008, 2069189009, 2069189010, 2069189011, 2069189012, 2069189013, 2069189014, 2069189015

METHOD BLANK: 429542 | Matrix: Water
Associated Lab Samples: 2069189001, 2069189002, 2069189003, 2069189004, 2069189005, 2069189006, 2069189007, 2069189008, 2069189009, 2069189010, 2069189011, 2069189012, 2069189013, 2069189014, 2069189015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/18 14:39	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/18 14:39	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/18 14:39	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	01/23/18 14:39	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/18 14:39	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/18 14:39	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/23/18 14:39	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/18 14:39	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/18 14:39	
2-Butanone (MEK)	ug/L	ND	2.0	01/23/18 14:39	
2-Hexanone	ug/L	ND	2.0	01/23/18 14:39	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2.0	01/23/18 14:39	
Acetone	ug/L	ND	4.0	01/23/18 14:39	
Acrolein	ug/L	ND	8.0	01/23/18 14:39	
Acrylonitrile	ug/L	ND	4.0	01/23/18 14:39	
Benzene	ug/L	ND	1.0	01/23/18 14:39	
Bromodichloromethane	ug/L	ND	1.0	01/23/18 14:39	
Bromoform	ug/L	ND	1.0	01/23/18 14:39	
Bromomethane	ug/L	ND	1.0	01/23/18 14:39	
Carbon disulfide	ug/L	ND	1.0	01/23/18 14:39	
Carbon tetrachloride	ug/L	ND	1.0	01/23/18 14:39	
Chlorobenzene	ug/L	ND	1.0	01/23/18 14:39	
Chloroethane	ug/L	ND	1.0	01/23/18 14:39	
Chloroform	ug/L	ND	1.0	01/23/18 14:39	
Chloromethane	ug/L	ND	1.0	01/23/18 14:39	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/18 14:39	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/18 14:39	
Dibromochloromethane	ug/L	ND	1.0	01/23/18 14:39	
Dibromomethane	ug/L	ND	1.0	01/23/18 14:39	
Enflurane	ug/L	ND	1.0	01/23/18 14:39	
Ethylbenzene	ug/L	ND	1.0	01/23/18 14:39	
Haloether 229	ug/L	ND	1.0	01/23/18 14:39	
Haloether 406	ug/L	ND	1.0	01/23/18 14:39	
Haloether 421	ug/L	ND	1.0	01/23/18 14:39	
Haloether 427	ug/L	ND	1.0	01/23/18 14:39	
Haloether 428	ug/L	ND	1.0	01/23/18 14:39	
Haloether 508	ug/L	ND	1.0	01/23/18 14:39	
Haloether 528	ug/L	ND	1.0	01/23/18 14:39	
Halomar	ug/L	ND	1.0	01/23/18 14:39	
Isoflurane	ug/L	ND	1.0	01/23/18 14:39	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069189

METHOD BLANK: 429542 Matrix: Water

Associated Lab Samples: 2069189001, 2069189002, 2069189003, 2069189004, 2069189005, 2069189006, 2069189007, 2069189008, 2069189009, 2069189010, 2069189011, 2069189012, 2069189013, 2069189014, 2069189015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	01/23/18 14:39	
Methoxyflurane	ug/L	ND	1.0	01/23/18 14:39	
Methylene Chloride	ug/L	ND	5.0	01/23/18 14:39	
o-Xylene	ug/L	ND	1.0	01/23/18 14:39	
Styrene	ug/L	ND	1.0	01/23/18 14:39	
Tetrachloroethene	ug/L	ND	1.0	01/23/18 14:39	
Toluene	ug/L	ND	1.0	01/23/18 14:39	
Total Haloether	ug/L	ND	1.0	01/23/18 14:39	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/18 14:39	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/18 14:39	
Trichloroethene	ug/L	ND	1.0	01/23/18 14:39	
Trichlorofluoromethane	ug/L	ND	1.0	01/23/18 14:39	
Vinyl chloride	ug/L	ND	1.0	01/23/18 14:39	
4-Bromofluorobenzene (S)	%.	101	68-124	01/23/18 14:39	
Dibromofluoromethane (S)	%.	101	72-126	01/23/18 14:39	
Toluene-d8 (S)	%.	100	79-119	01/23/18 14:39	

LABORATORY CONTROL SAMPLE: 429543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.4	103	62-131	
1,1,2,2-Tetrachloroethane	ug/L	50	52.2	104	15-179	
1,1,2-Trichloroethane	ug/L	50	47.7	95	58-144	
1,1,2-Trichlorotrifluoroethane	ug/L	50	53.6	107	38-121	
1,1-Dichloroethane	ug/L	50	49.9	100	63-129	
1,1-Dichloroethene	ug/L	50	48.9	98	51-139	
1,2,3-Trichloropropane	ug/L	50	50.5	101	13-187	
1,2-Dichloroethane	ug/L	50	48.1	96	57-148	
1,2-Dichloropropane	ug/L	50	48.7	97	66-128	
2-Butanone (MEK)	ug/L	50	50.5	101	32-183	
2-Hexanone	ug/L	50	53.1	106	36-170	
4-Methyl-2-pentanone (MIBK)	ug/L	50	52.4	105	26-171	
Acetone	ug/L	50	48.6	97	22-165	
Acrolein	ug/L	50	45.4	91	10-131	
Acrylonitrile	ug/L	50	51.5	103	18-149	
Benzene	ug/L	50	46.9	94	62-131	
Bromodichloromethane	ug/L	50	50.8	102	69-132	
Bromoform	ug/L	50	45.1	90	35-166	
Bromomethane	ug/L	50	44.1	88	34-158	
Carbon disulfide	ug/L	50	49.8	100	31-128	
Carbon tetrachloride	ug/L	50	49.7	99	54-144	
Chlorobenzene	ug/L	50	48.4	97	70-127	
Chloroethane	ug/L	50	46.4	93	17-195	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069189

LABORATORY CONTROL SAMPLE: 429543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	50	49.7	99	73-134	
Chloromethane	ug/L	50	46.4	93	17-153	
cis-1,2-Dichloroethene	ug/L	50	47.9	96	68-129	
cis-1,3-Dichloropropene	ug/L	50	51.9	104	72-138	
Dibromochloromethane	ug/L	50	50.4	101	49-146	
Dibromomethane	ug/L	50	48.9	98	56-145	
Enflurane	ug/L	50	51.7	103	56-135	
Ethylbenzene	ug/L	50	47.2	94	66-126	
Haloether 229	ug/L	50	50.0	100	62-123	
Haloether 406	ug/L	50	46.5	93	62-134	
Haloether 421	ug/L	50	39.5	79	70-128	
Haloether 427	ug/L	50	47.2	94	69-153	
Haloether 428	ug/L	50	45.4	91	70-134	
Haloether 508	ug/L	50	48.2	96	52-139	
Haloether 528	ug/L	50	34.2	68	48-157	
Halomar	ug/L	50	45.4	91	62-128	
Isoflurane	ug/L	50	52.0	104	61-132	
m&p-Xylene	ug/L	100	96.8	97	65-129	
Methoxyflurane	ug/L	50	40.2	80	72-124	
Methylene Chloride	ug/L	50	49.0	98	46-168	
o-Xylene	ug/L	50	48.7	97	65-124	
Styrene	ug/L	50	51.1	102	72-133	
Tetrachloroethene	ug/L	50	53.1	106	46-157	
Toluene	ug/L	50	46.9	94	69-126	
Total Haloether	ug/L		500			
trans-1,2-Dichloroethene	ug/L	50	53.0	106	60-129	
trans-1,3-Dichloropropene	ug/L	50	50.8	102	59-149	
Trichloroethene	ug/L	50	46.5	93	67-132	
Trichlorofluoromethane	ug/L	50	56.9	114	39-171	
Vinyl chloride	ug/L	50	50.6	101	27-149	
4-Bromofluorobenzene (S)	%.			101	68-124	
Dibromofluoromethane (S)	%.			101	72-126	
Toluene-d8 (S)	%.			100	79-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 429544 429545

Parameter	Units	2069189004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	64.7	59.6	129	119	54-137	8	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	60.5	55.4	121	111	15-187	9	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	52.5	52.6	105	105	59-148	0	20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	50	64.6	64.0	129	128	40-117	1	20	M1
1,1-Dichloroethane	ug/L	ND	50	50	59.0	56.7	118	113	59-133	4	20	
1,1-Dichloroethene	ug/L	ND	50	50	60.1	55.7	120	111	44-146	8	20	
1,2,3-Trichloropropane	ug/L	ND	50	50	55.4	50.6	111	101	14-199	9	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069189

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 429544 429545

Parameter	Units	2069189004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	54.3	51.0	109	102	56-154	6	20	
1,2-Dichloropropane	ug/L	ND	50	50	57.0	54.3	114	109	62-135	5	20	
2-Butanone (MEK)	ug/L	ND	50	50	56.8	53.9	114	108	20-205	5	20	
2-Hexanone	ug/L	ND	50	50	60.3	56.8	121	114	25-189	6	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	61.9	58.5	124	117	23-184	6	20	
Acetone	ug/L	ND	50	50	64.9	59.9	122	112	11-217	8	20	
Acrolein	ug/L	ND	50	50	57.8	54.5	116	109	10-142	6	20	
Acrylonitrile	ug/L	ND	50	50	61.3	53.8	123	108	20-164	13	20	
Benzene	ug/L	ND	50	50	54.6	52.6	109	105	52-141	4	20	
Bromodichloromethane	ug/L	ND	50	50	58.8	55.2	118	110	70-134	6	20	
Bromoform	ug/L	ND	50	50	51.6	49.5	103	98	37-171	4	20	
Bromomethane	ug/L	ND	50	50	57.0	52.2	114	104	34-155	9	20	
Carbon disulfide	ug/L	ND	50	50	63.6	56.7	127	113	28-130	11	20	
Carbon tetrachloride	ug/L	ND	50	50	60.2	57.6	120	115	48-146	4	20	
Chlorobenzene	ug/L	ND	50	50	57.4	53.8	115	108	67-129	7	20	
Chloroethane	ug/L	ND	50	50	60.3	56.5	121	113	12-192	7	20	
Chloroform	ug/L	ND	50	50	57.4	54.2	115	108	66-143	6	20	
Chloromethane	ug/L	ND	50	50	57.1	53.4	114	107	14-155	7	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	56.2	53.1	112	106	56-141	6	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	58.4	54.9	117	110	70-139	6	20	
Dibromochloromethane	ug/L	ND	50	50	56.7	52.4	113	105	50-150	8	20	
Dibromomethane	ug/L	ND	50	50	55.7	53.3	111	107	58-153	4	20	
Enflurane	ug/L	ND	50	50	62.8	60.0	126	120	63-126	5	20	
Ethylbenzene	ug/L	ND	50	50	56.5	53.7	113	107	57-135	5	20	
Haloether 229	ug/L	ND	50	50	65.6	61.6	131	123	56-127	6	20	
Haloether 406	ug/L	ND	50	50	57.5	54.0	115	108	68-128	6	20	
Haloether 421	ug/L	ND	50	50	46.9	45.4	94	91	74-120	3	20	
Haloether 427	ug/L	ND	50	50	55.7	54.7	111	109	78-120	2	20	
Haloether 428	ug/L	ND	50	50	54.1	53.9	108	108	74-125	0	20	
Haloether 508	ug/L	ND	50	50	60.7	55.4	121	111	28-156	9	20	
Haloether 528	ug/L	ND	50	50	38.1	33.2	76	66	45-142	14	20	
Halomar	ug/L	ND	50	50	54.6	51.5	109	103	67-123	6	20	
Isoflurane	ug/L	ND	50	50	64.5	59.7	129	119	45-140	8	20	
m&p-Xylene	ug/L	ND	100	100	111	108	111	108	56-136	3	20	
Methoxyflurane	ug/L	ND	50	50	45.9	43.7	92	87	75-119	5	20	
Methylene Chloride	ug/L	ND	50	50	56.0	52.1	112	104	45-166	7	20	
o-Xylene	ug/L	ND	50	50	56.3	53.3	113	107	57-133	6	20	
Styrene	ug/L	ND	50	50	57.4	55.0	115	110	58-144	4	20	
Tetrachloroethene	ug/L	ND	50	50	64.4	62.2	127	123	48-143	4	20	
Toluene	ug/L	ND	50	50	55.1	51.9	110	104	59-136	6	20	
Total Haloether	ug/L	ND			606	573				6		
trans-1,2-Dichloroethene	ug/L	ND	50	50	62.8	59.6	126	119	57-132	5	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	56.0	54.3	112	109	59-154	3	20	
Trichloroethene	ug/L	ND	50	50	57.0	54.5	114	109	58-140	4	20	
Trichlorofluoromethane	ug/L	ND	50	50	75.2	70.5	150	141	24-175	6	20	

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QUALITY CONTROL DATA

Project: 2SAR2017
Pace Project No.: 2069189

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 429544 429545

Parameter	Units	2069189004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	ND	50	50	66.5	62.8	133	126	21-150	6	20	
4-Bromofluorobenzene (S)	%.						100	99	68-124			
Dibromofluoromethane (S)	%.						100	102	72-126			
Toluene-d8 (S)	%.						100	99	79-119			

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QUALIFIERS

Project: 2SAR2017
Pace Project No.: 2069189

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2SAR2017
Pace Project No.: 2069189

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2069189001	**TB-20180111**	EPA 5030B/8260	99687		
2069189002	**EB-20180111**	EPA 5030B/8260	99687		
2069189003	**FB-20180111**	EPA 5030B/8260	99687		
2069189004	**MW-1B-3**	EPA 5030B/8260	99687		
2069189005	**MW-1B-2**	EPA 5030B/8260	99687		
2069189006	**PCMW-1**	EPA 5030B/8260	99687		
2069189007	**ES-19**	EPA 5030B/8260	99687		
2069189008	**AWPI-MW-1**	EPA 5030B/8260	99687		
2069189009	**AWPI-MW-2**	EPA 5030B/8260	99687		
2069189010	**EB-20180112**	EPA 5030B/8260	99687		
2069189011	**FB-20180112**	EPA 5030B/8260	99687		
2069189012	**MW-4D-1BR**	EPA 5030B/8260	99687		
2069189013	**MW-4D-4**	EPA 5030B/8260	99687		
2069189014	**MW-4D-2**	EPA 5030B/8260	99687		
2069189015	**MW-4D-3**	EPA 5030B/8260	99687		

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without the written consent of Pace Analytical Services, LLC.

WO# : 2069189

2069189

CHAIN-OF-CUSTOD

The Chain-of-Custody is a LEG

Pace Analytical

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Page : 1 Of 1

Regulatory Agency

State / Location: PR

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Requested Analysis Filtered (Y/N)): VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	TB-20180111	WT	G			01/11/18	LAB		2				2						X		
2	EB-20180111	WT	G			01/11/18	0800		3				3					X			
3	FB-20180111	WT	G			01/11/18	1025		3				3					X			
4	MW-1B-3	WT	G			01/11/18	1101		3				3					X			
5	MW-1B-2	WT	G			01/11/18	1129		3				3					X			
6	PCMW-1	WT	G			01/11/18	1219		3				3					X			
7	ES-19	WT	G			01/11/18	1310		3				3					X			
8	AWPI-MW-1	WT	G			01/11/18	1358		3				3					X			
9	AWPI-MW-2	WT	G			01/11/18	1435		3				3					X			
10	EB-20180112	WT	G			01/12/18	0820		3				3					X			
11	FB-20180112	WT	G			01/12/18	0930		3				3					X			
12	MW-4D-1BR	WT	G			01/12/18	1009		3				3					X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andrí Colon / Arcadis	01/12/18	1546	[illegible]	01/12/18	1546	4°	Y	N	Y
	FedEx	1/20/18	945	[illegible] / Pace	1/20/18	945	1.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrí Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 01/12/18

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	MW-4D-4	WT	G			01/12/18	1101		3				3					X			
2	MW-4D-2	WT	G			01/12/18	1209		3				3					X			
3	MW-4D-3	WT	G			01/12/18	1301		3				3					X			
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andi Colon / Arcadis	01/12/18	1546	[illegible] - Pace	01/12/18	1546	4.0	Y	N	Y
	FedEx			[illegible] Pace	1/20/18	945	1.1	y	y	y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andi Colon

SIGNATURE of SAMPLER: [illegible]

DATE Signed: 01/12/18

WO#: 2069189

PM: CJM Due Date: 02/05/18

CLIENT: 20-CHEV-ARC

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon I

Pro,

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 1-22-18

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☐Yes	☑No	☐N/A	1	
Chain of Custody Present:	☑Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6	
Sufficient Volume:	☑Yes	☐No	☐N/A	7	
Correct Containers Used:	☑Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☑No	☐N/A	9	
Sample Labels match COC:	☑Yes	☐No	☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14	
Trip Blank Present:	☑Yes	☐No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

APPENDIX B

Table B-1: Groundwater VOC Concentrations (on CD)

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		ES-21	AWPI-MW-1	AWPI-MW-2	ES-19	MW-15-90	MW-11-20	MW-17-90	MW-19-90	MW-22-90	GWDUP002 of MW-22-90	MW-4-90	MW-6-90	MW-9-90	MW-1B-1BR	MW-1B-1BR-BP	MW-1B-2	MW-1B-3	MW-1B-4	MW-1B-4-BP	PCMW-2
Lab Sample ID:		2066110014	2069189008	2069189009	2069189007	2067491012	2067491008	2067491013	2067491009	2067700004	2067700005	2067700008	2067491005	2066645015	2066110010	2065701004	2069189005	2069189004	2066110011	2065701005	2066110008
Sample Date:		11/29/2017	1/11/2018	1/11/2018	1/11/2018	12/13/2017	12/12/2017	12/13/2017	12/12/2017	12/19/2017	12/19/2017	12/20/2017	12/11/2017	12/6/2017	11/28/2017	11/13/2017	1/11/2018	1/11/2018	11/28/2017	11/13/2017	11/28/2017
Volatile Organic Compounds (µg/L)	**GWCC**																				
Tetrachloroethene	5	1.0 U	3.1	**5.8**	1.0 U	3.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	**33.7**	**53.4 J**	1.3	1.0 U	1.0 U	1.6	**10.5**
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.6	3.5	1.0 U	1.0 U	1.0 U	1.0 U	1.5
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	4.0 U	4.0 U	9.7 UB	4.0 U	4.2 UB	4.0 U	4.0 U	4.4 UB	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	4.7	1.0 U	1.0 U	1.0 U	1.0 U	2.0
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																					
Enflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0	1.0 U	1.0 U	1.0 U	1.0 U	6.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 229	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0	5.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.7	1.0 U	1.0 U	1.0 U	1.0 U	5.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.3	2.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	ND	ND	ND	ND	7.7	ND	ND	ND	ND	24.2	7.8	1.0 U	ND	ND	ND	ND	ND	ND	ND

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		GWDUP0001 of PCMW-2	PCMW-2 -BP	MW-1A-1BR	MW-1A-2	MW-1A-3	MW-1A-3-BP	MW-1A-4	MW-1D-1BR	MW-1D-2	MW-1D-3	MW-1D-3-BP	MW-1D-4	PCMW-1	AN-1	OW-1	RW-5	PCMW-5	AN-2	MW-5-90	MW-3A-1BR
Lab Sample ID:		2066110009	2065701006	2066833010	2067491004	2066833009	2066645004	2066833011	2066833004	2066833006	2066645013	2066645005	2066833005	2069189006	2067700006	2067700010	2068819012	2067700011	2067700014	2067700015	2067983004
Sample Date:		11/28/2017	11/13/2017	12/8/2017	12/11/2017	12/8/2017	12/4/2017	12/8/2017	12/7/2017	12/7/2017	12/6/2017	12/4/2017	12/7/2017	1/11/2018	12/19/2017	12/20/2017	1/9/2018	12/20/2017	12/21/2017	12/21/2017	12/27/2017
Volatile Organic Compounds (µg/L)	**GWCC**																				
Tetrachloroethene	5	**9.6**	**21.2**	1.0 U	1.0 U	1.0 U	1.8	1.0 U	4.2	4.3	3.7	4.5	1.0 U	1.0 U	1.0 U	1.0 U	**16.8**	1.0 U	1.0 U	1.0 U	2.5
Trichloroethene	5	1.3	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	4.0 U	4.0 U	4.6	4.0 U	4.8	4.0 U	6.0	4.2 UB	5.9 UB	5.9 UB	4.0 U	5.2 UB	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.1 UB	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.9	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.2	1.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																					
Enflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9	1.0 U	1.0 U	2.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 229	50	1.0 U	1.0 U	1.0 U	1.4	5.1	4.3	8.0	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.3	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	1.0 U	1.0 U	3.6	30.6	**54.7**	36.7	1.0 U	1.0 U	25.6	**127**	4.1	1.0 U	1.0 U	47.8	**58.3**	6.9	3.1	3.4	1.0 U
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	7.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	1.0 U	1.0 U	8.1	23.3	19.3	38.7	10.3	9.1	29.7	7.2	3.6	1.0 U	1.0 U	1.7	32.8	1.8	7.1	8.5	1.0 U
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	ND	ND	13.1	59.0	82.5	84.5	10.3	20.1	55.2	**134**	7.7	ND	1.0 U	49.5	**103**	8.7	10.2	11.8	ND

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		MW-3A-2	MW-3A-3	MW-3A-4	RW-1	FMW-5-90	FMW-5-90-BP	RW-2	MW-1C-1BRA	MW-1C-1BRA-BP	MW-1C-2	MW-1C-3	MW-1C-4	FMW-4-20	FMW-4-90	MW-2C-1BR	MW-2C-2	MW-2C-3	MW-2C-3-BP	MW-2C-4	MW-2C-5
Lab Sample ID:		2067983005	2067983006	2066645011	2069066008	2065701014	2065329004	2068274004	2065701018	2065329007	2068819004	2068819005	2068819006	2067983009	2067983010	2068274008	2068274010	2066110005	2065701009	2068274009	2068274011
Sample Date:		12/27/2017	12/27/2017	12/5/2017	1/16/2018	11/15/2017	11/8/2017	1/3/2018	11/17/2017	11/9/2017	1/8/2018	1/8/2018	1/8/2018	12/28/2017	12/28/2017	1/4/2018	1/4/2018	11/27/2017	11/14/2017	1/4/2018	1/4/2018
Volatile Organic Compounds (µg/L)	**GWCC**																				
Tetrachloroethene	5	**14.8**	1.0 U	1.0 U	1.3	5.1	**5.0**	4.4	**10.7**	**16.6**	3.1	2.0	1.0 U	1.0 U	1.0	1.0 U	3.1	1.0 U	2.9	1.0 U	1.0 U
Trichloroethene	5	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	4.0 U	6.6	4.9 UB	4.0 U	4.0 U	4.0 U	4.0 U	6.8 UB	4.0 U	4.0 U	5.7 UB	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	1.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	34.7	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.8	3.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	2.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																					
Enflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7	1.0 U	1.4	1.0 U	1.0 U
Haloether 229	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	12.7	1.5	1.0 U	1.0 U	1.0 U	1.0 U	14.3	25.3	2.0	42.8	14.7	34.5	3.5	5.3
Haloether 406	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7	1.0 U	1.1	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	1.0 U	1.0 U	1.0 U	**97.3**	**123**	33.9	4.9	1.0 U	1.0 U	1.0 U	1.0 U	6.3	15.4	6.4	49.6	7.6	29.1	6.2	4.5
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	8.5	10.5	**65.2**	15.4	9.5	1.0 U	1.0 U	1.0 U	**162**	**198**	15.6	**165 D**	**76.6**	**147**	18.1	25.5
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	ND	ND	ND	**106**	**134**	**115**	21.8	9.5	1.0 U	ND	ND	**182**	**238**	24.0	**261 D**	98.9	**213**	27.8	35.2

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		MW-1	MW-4B-1BR	MW-4B-1BR-BP	MW-4B-2	MW-4B-3	MW-4B-3-BP	MW-4B-4	MW-4B-4-BP	MW-2	RW-3	GWDUP004 of RW-3	MW-4C-1BR	MW-4C-2	MW-4C-3	MW-4C-4	FMW-3-90	FMW-3-90-BP	USGS-TW-A1	GWDUP003 of USGS-TW-A1	USGS-TW-A2
Lab Sample ID:		2066645010	2065701015	2065329010	2066645008	2066562005	2065329011	2066645009	2065701005	2068819016	2069066006	2069066007	2069066004	2068819017	2069066005	2068819018	2066562004	2065701010	2068819010	2068819011	2068819009
Sample Date:		12/5/2017	11/15/2017	11/10/2017	12/5/2017	11/30/2017	11/10/2017	12/5/2017	11/13/2017	1/10/2018	1/16/2018	1/16/2018	1/16/2018	1/10/2018	1/16/2018	1/10/2018	11/30/2017	11/14/2017	1/9/2018	1/9/2018	1/9/2018
Volatile Organic Compounds (µg/L)	**GWCC**																				
Tetrachloroethene	5	2.2	1.0 U	1.0 U	2.0	2.7	**12.6**	1.4	1.6	1.0 U	1.7	1.8	1.0 U	2.0	1.6	1.7	**7.5**	**24.8**	3.5	3.4	1.7
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.1	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	4.8	1.6	1.0 U	5.5 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.3	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	8.4 UB	7.1 UB	4.0 U	4.0 U	4.0 U	4.0 U	5.6 UB	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.1	1.4	1.2	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																					
Enflurane	50	1.0 U	6.2	7.4	5.8	1.3	6.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	3.8	1.0 U	1.0 U	2.3	5.5	1.0 U	1.0 U	1.0 U
Haloether 229	50	1.0 U	17.2	35.5	7.6	1.0	11.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.6	4.2	1.0 U	1.0 U	1.7	3.7	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.1	1.5	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	16.7	**146**	28.1	28.3	**145 D**	1.0 U	1.0 U	6.6	1.0 U	1.0 U	9.3	16.7	3.1	1.0 U	40.0	**75.5**	7.4	7.6	2.7
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	4.7	6.1	6.0	1.0 U	4.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.3	1.0 U	1.0 U	1.3	2.3	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	**163**	**103**	**155**	10.6	**58.1**	1.0 U	1.0 U	2.8	1.1	1.5	**97.8**	28.0	2.5	1.0 U	12.7	30.8	4.5	4.7	3.8
Methoxyflurane	50	1.0 U	1	1.7	1.7	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	**210**	**301**	**205**	41.3	**229 D**	ND	ND	9.4	1.1	1.5	**120**	54.0	5.7	ND	58.1	**118**	12.0	12.3	6.5

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		RW-4	FMW-2-90	FMW-2-90-BP	MW-4D-1BR	MW-4D-2	MW-4D-3	MW-4D-4	FMW-1-20	FMW-1-90	FMW-6-90	EB-20171108	EB-20171109	EB-20171110	EB-20171113	EB-20171114	EB-20171115	EB-20171117	EB-20171127
Lab Sample ID:		2068274005	2066110004	2065701011	2069189012	2069189014	2069189015	2069189013	2066562009	2066562008	2068819015	2065329002	2065329005	2065329008	2065701002	2065701007	2065701012	2065701016	2066110002
Sample Date:		1/3/2018	11/27/2017	11/14/2017	1/12/2018	1/12/2018	1/12/2018	1/12/2018	12/1/2017	12/1/2017	1/10/2018	11/8/2017	11/9/2017	11/10/2017	11/13/2017	11/14/2017	11/15/2017	11/17/2017	11/27/2017
Volatile Organic Compounds (µg/L)	**GWCC**																		
Tetrachloroethene	5	3.2	**9.4**	**11.3**	1.0	1.0 U	2.9	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	2.5	2.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	9.1 UB	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.7	4.1	4.0 U	4.7	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.4	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																			
Enflurane	50	1.0 U	12.3	13.7	2.1	1.4	5.1	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 229	50	2.9	14.5	14.1	1.4	1.3	6.8	1.0 U	1.0 U	2.0	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.9	1.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	31.9	**98.1**	**109**	8.0	3.8	7.9	3.1	1.0 U	3.9	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 528	50	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	3.7	4.1	1.1	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	21.5	**70.4**	**74.6**	10.0	8.7	27.0	2.1	2.8	7.3	10.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	56.,3	**202**	**217**	22.6	15.2	48.1	5.2	2.8	14.5	16.8	ND	ND	ND	ND	ND	ND	ND	ND

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		EB-20171128	EB-20171129	EB-20171130	EB-20171201	EB-20171204	EB-20171205	EB-20171206	EB-20171207	EB-20171208	EB-20171211	EB-20171212	EB-20171213	EB-20171219	EB-20171220	EB-20171221	EB-20171227	EB-20171228	EB-20180103
Lab Sample ID:		2066110006	2066110012	2066562001	2066562006	2066645002	2066645006	2066645012	2066833002	2066833007	2067491002	2067491006	2067491010	2067700002	2067700007	2067700013	2067983002	2067983007	2068274002
Sample Date:		11/28/2017	11/29/2017	11/30/2017	12/1/2017	12/4/2017	12/5/2017	12/6/2017	12/7/2017	12/8/2017	12/11/2017	12/12/2017	12/13/2017	12/19/2017	12/20/2017	12/21/2017	12/27/2017	12/28/2017	1/3/2018
Volatile Organic Compounds (µg/L)	**GWCC**																		
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	4.0 U	4.0 U	4.6	4.0 U	8.0	4.0 U	8.3	4.0 U	4.0 U	4.0 U	4.0 U	10.2	9.4	13.5	5.9	4.0 U	4.0 U	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																			
Enflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 229	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		EB-20180104	EB-20180108	EB-20180109	EB-20180110	EB-20180111	EB-20180112	EB-20180116	FB-20171108	FB-20171109	FB-20171110	FB-20171113	FB-20171114	FB-20171115	FB-20171117	FB-20171127	FB-20171128	FB-20171129	FB-20171130
Lab Sample ID:		2068274006	2068819002	2068819007	2068819013	2069189002	2069189010	2069066002	2065329003	2065329006	2065329009	2065701003	2065701008	2065701013	2065701017	2066110003	2066110007	2066110013	2066562003
Sample Date:		1/4/2018	1/8/2018	1/9/2018	1/10/2018	1/11/2018	1/12/2018	1/16/2018	5/8/2017	11/9/2017	11/10/2017	11/13/2017	11/14/2017	11/15/2017	11/17/2017	11/27/2017	11/28/2017	11/29/2017	11/30/2017
Volatile Organic Compounds (µg/L)	**GWCC**																		
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	12.6	7.5	4.0 U	4.0 U	11.3	4.0 U	4.0 U	4.0 U	4.0 U	4.5	4.2	4.0 U	4.4	9.6	4.0 U	4.0 U	4.0 U	5.4
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																			
Enflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 229	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		FB-20171201	FB-20171204	FB-20171205	FB-20171206	FB-20171207	FB-20171208	FB-20171211	FB-20171212	FB-20171213	FB-20171219	FB-20171220	FB-20171221	FB-20171227	FB-20171228	FB-20180103	FB-20180104	FB-20180108	FB-20180109	FB-20180110
Lab Sample ID:		2066562007	2066645003	2066645007	2066645014	2066833003	2066833008	2067491003	2067491007	2067491011	2067700003	2067700009	2067700012	2067983003	2067983008	2068274003	2068274007	2068819003	2068819008	2068819014
Sample Date:		12/1/2017	12/4/2017	12/5/2017	12/6/2017	12/7/2017	12/8/2017	12/11/2017	12/12/2017	12/13/2017	12/19/2017	12/20/2017	12/21/2017	12/27/2017	12/28/2017	1/3/2018	1/4/2018	1/8/2018	1/9/2018	1/10/2018
Volatile Organic Compounds (µg/L)	**GWCC**																			
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	7.8	5.5	4.1	4.4	5.2	4.0 U	4.0 U	13.0	16.1	10.7	4.0 U	7.3	4.0 U	4.0 U	8.7	12.8	7.1	9.3	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) [(1)]																				
Enflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 229	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Location/Field Sample ID:		FB-20180111	FB-20180112	FB-20180116	TB-20171107	TB-20171113	TB-20171127	TB-20171130	TB-20171204	TB-20171207	TB-20171211	TB-20171219	TB-20171227	TB-20180103	TB-20180108	TB-20180111	TB-20180116
Lab Sample ID:		2069189003	2069189011	2069066003	2065329001	2065701001	2066110001	2066562002	2066645001	2066833001	2067491001	2067700001	2067983001	2068274001	2068819001	2069189001	2069066001
Sample Date:		1/11/2018	1/12/2018	1/16/2018	11/7/2017	11/13/2017	11/27/2017	11/30/2017	12/4/2017	12/7/2017	12/11/2017	12/19/2017	12/27/2017	1/3/2018	1/8/2018	1/11/2018	1/16/2018
Volatile Organic Compounds (µg/L)	**GWCC**																
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	6.5	4.0 U	4.0 U	4.0 U	4.3	4.0 U	4.0 U	4.0 U
Acrolein	50	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Acrylonitrile	50	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylene	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloethers (µg/L) (1)																	
Enflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 229	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 406	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 421	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 427	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 428	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 508	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Haloether 528	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Halomar	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isoflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methoxyflurane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Haloethers	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table B-1
Groundwater VOC Concentrations
Second Semi-Annual Groundwater Monitoring Report for 2017
Fibers Public Supply Wells Superfund Site, Guayama, Puerto Rico

Notes:

Units in µg/L (micrograms per liter).

Results from United States Environmental Protection Agency (USEPA) Method 8260 analysis.

GWCC: Ground Water Cleanup Criteria (USEPA Maximum Contaminant Level [MCL] Drinking Water Standards).

Bold values exceed GWCC.

(1): Haloethers GWCC based on default standard for volatile organic compounds of 50 µg/L per individual compound or 100 µg/L for total of compounds.

U: The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J: The compound was positively identified; however, the associated numerical value is an estimated concentration only.

J+: The result is an estimated quantity, but the result may be biased high.

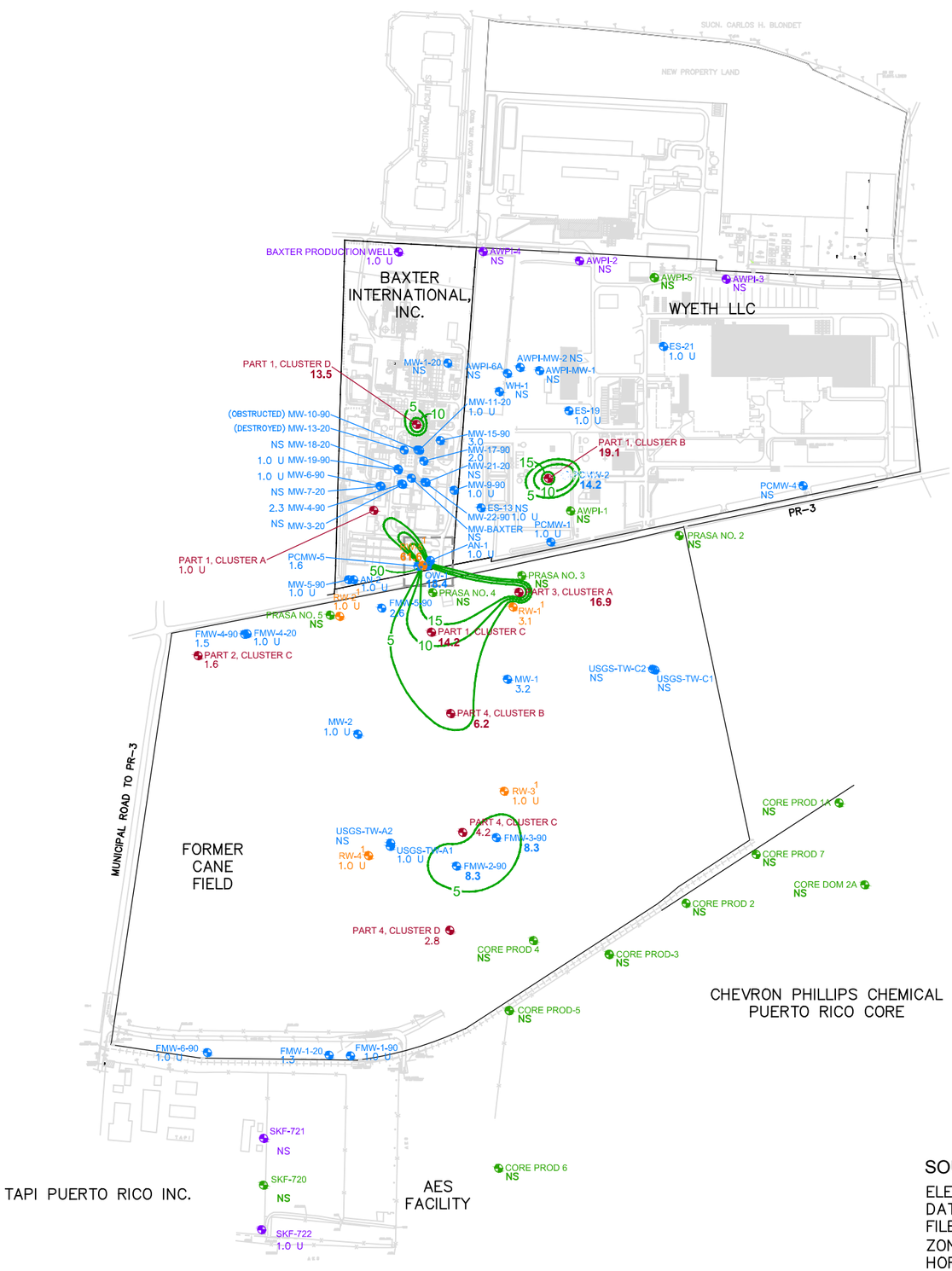
UJ: The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

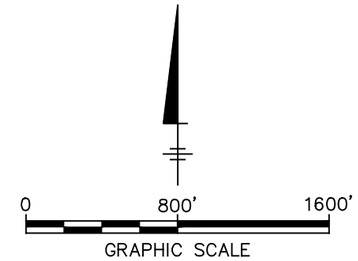
D: Concentration is based on a diluted sample analysis.

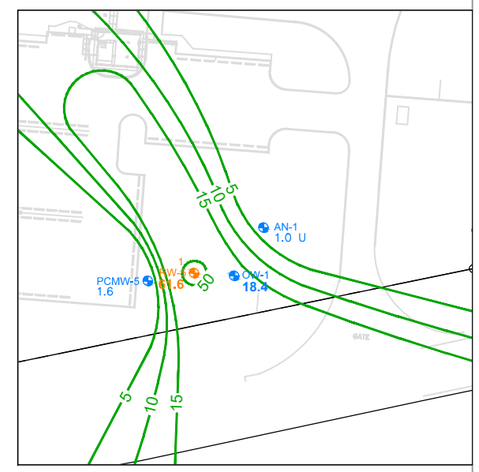
ND: Non-detect.

APPENDIX C

Tetrachloroethene (PCE), Isoflurane, Haloether 508 and Total Haloethers Isopleth Maps (2SAR2015, 1SAR2016, 2SAR2016, 1SAR2017) (on CD)







INSET

0' 100' 200'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 5 — TETRACHLOROETHENE (PCE) ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- 2.2 — PCE GROUNDWATER CONCENTRATION (µg/L)
- **14.4** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- NS — NOT SAMPLED
- PR-3 — PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2015

TETRACHLOROETHENE (PCE) ISOPLETH MAP (AUG-SEPT 2015)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-1**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 12:25pm
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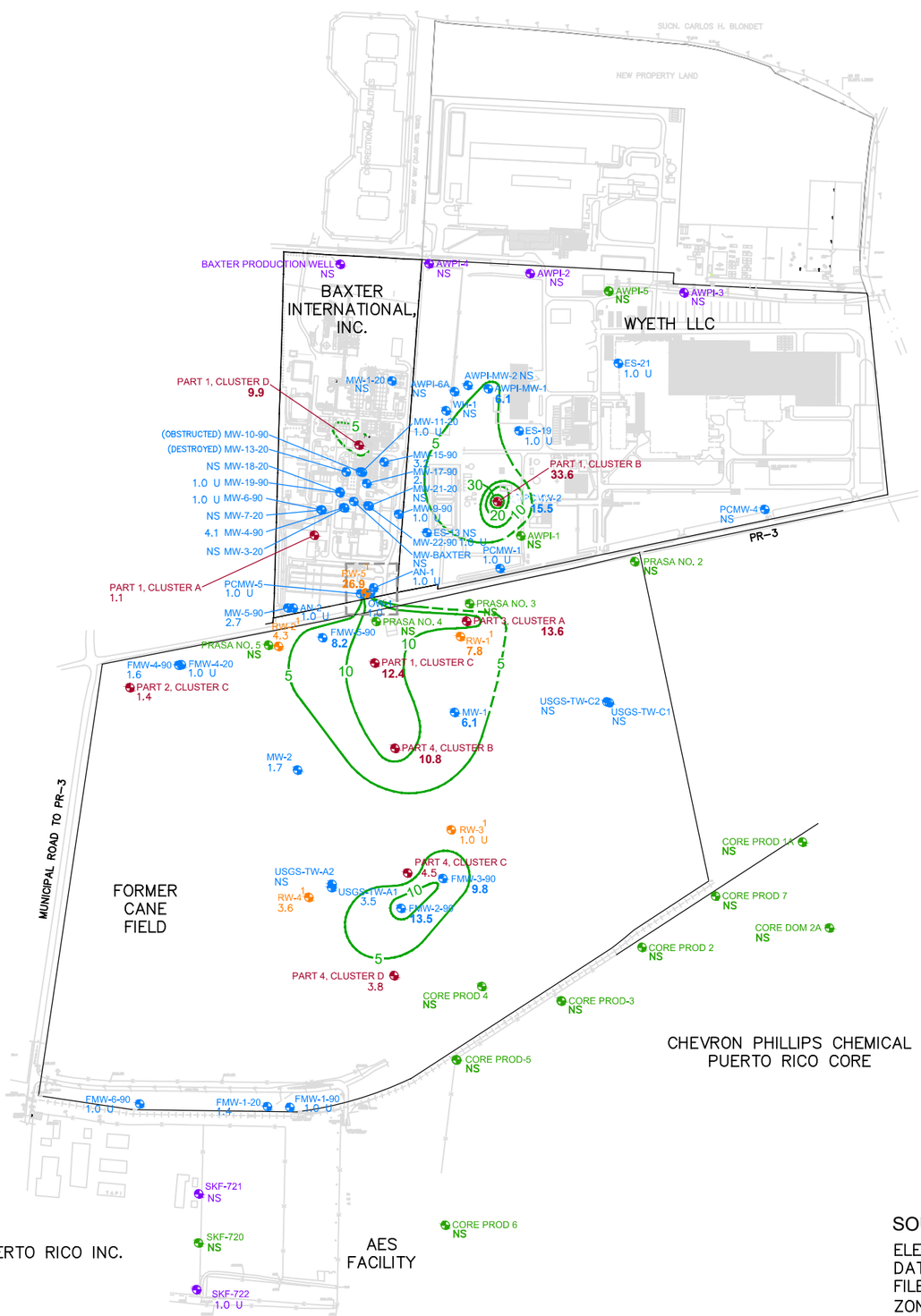

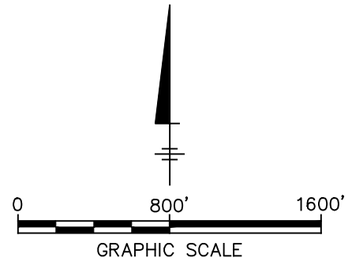

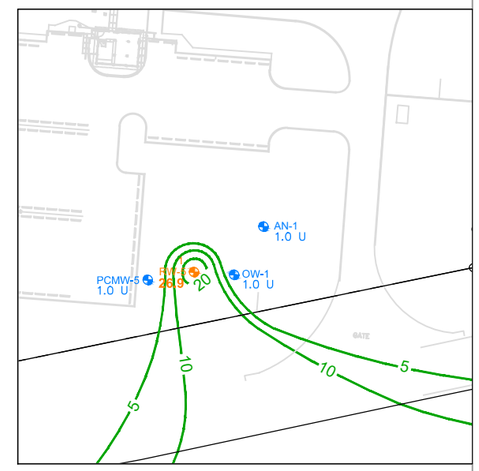

INSET

0' 100' 200'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 5 TETRACHLOROETHENE (PCE) ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- 2.2 PCE GROUNDWATER CONCENTRATION (µg/L)
- 14.4 CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- NS NOT SAMPLED
- PR-3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

TETRACHLOROETHENE (PCE) ISOPLETH MAP (APRIL-MAY 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-2**

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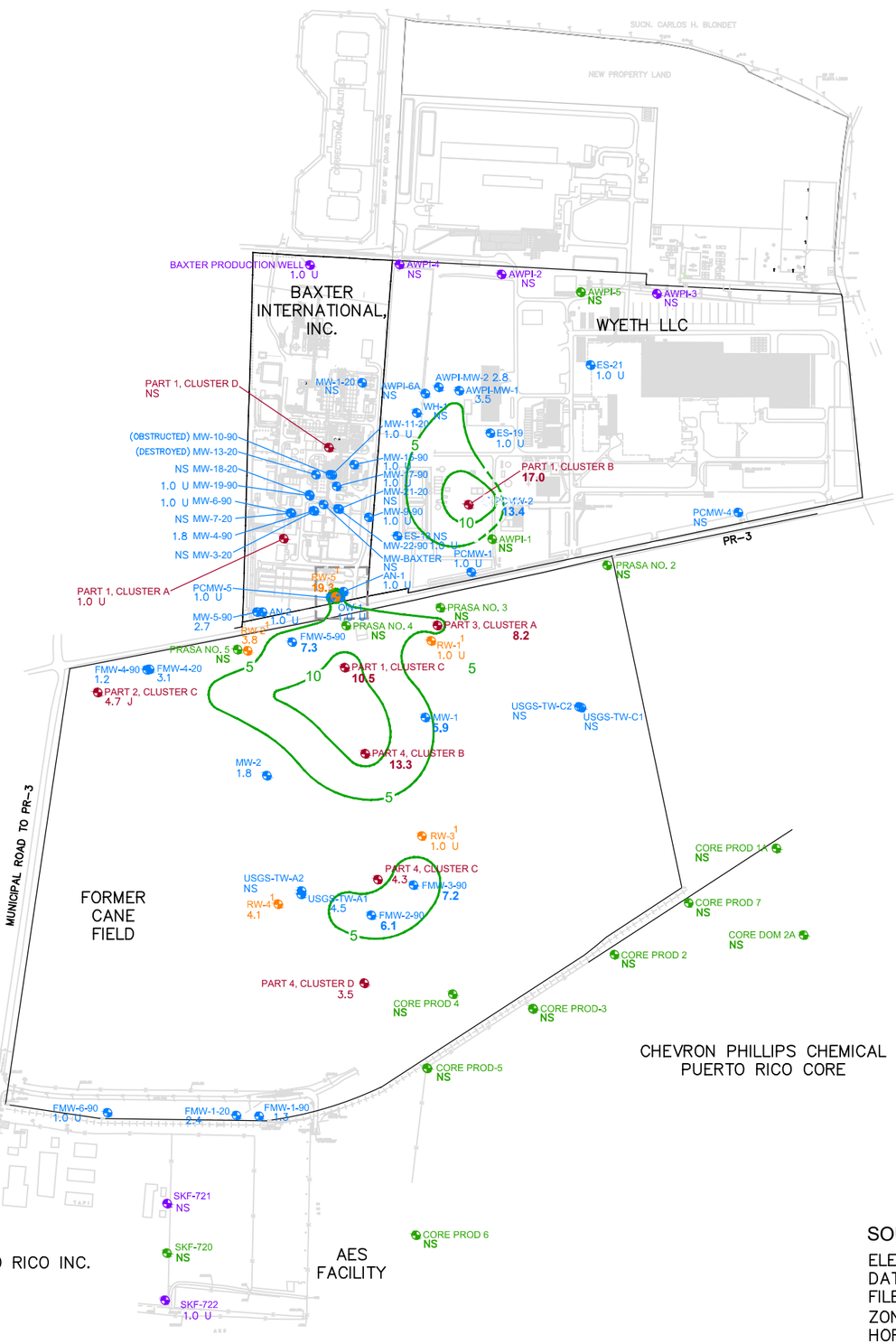

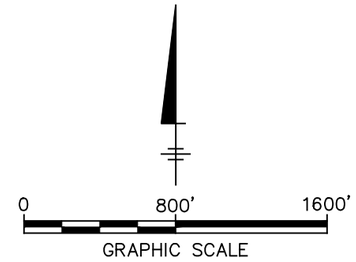

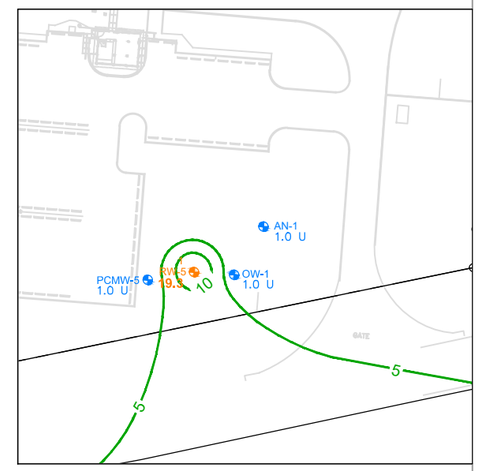

INSET

0' 100' 200'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 5 — TETRACHLOROETHENE (PCE) ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- 2.2 — PCE GROUNDWATER CONCENTRATION (µg/L)
- **14.4** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- NS — NOT SAMPLED
- PR-3 — PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

TETRACHLOROETHENE (PCE) ISOPLETH MAP (OCTOBER-DECEMBER 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-3**

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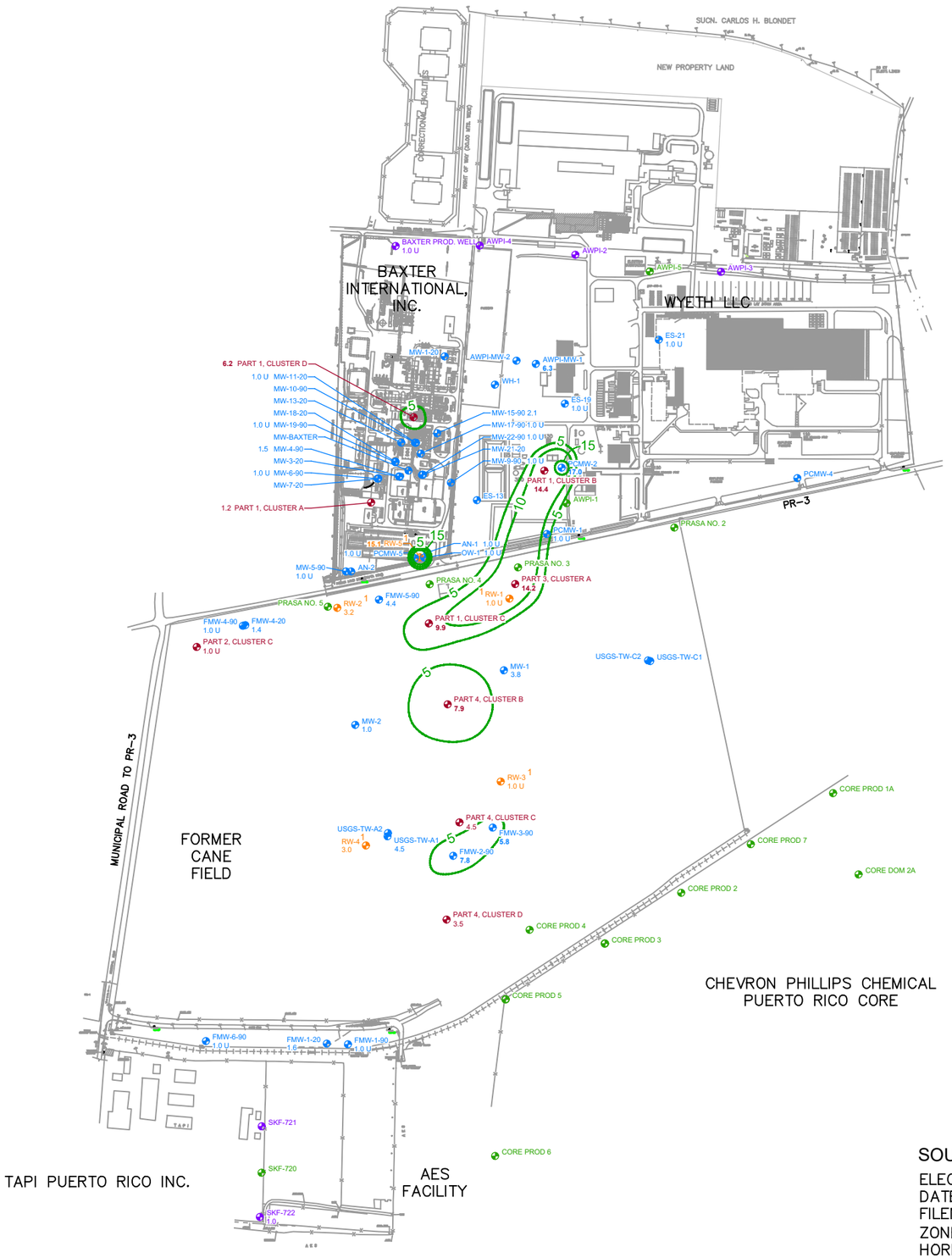

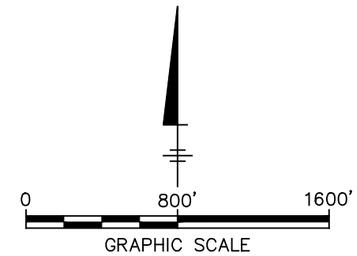

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 5 — TETRACHLOROETHENE (PCE) ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L])
- 5.5 — PCE GROUNDWATER CONCENTRATION (µg/L)
- **14.2** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 5 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- PR-3 — PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED.
3. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS.
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS.

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TETRACHLOROETHENE (PCE) ISOPLETH MAP (MAY - JUNE 2017)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-4**

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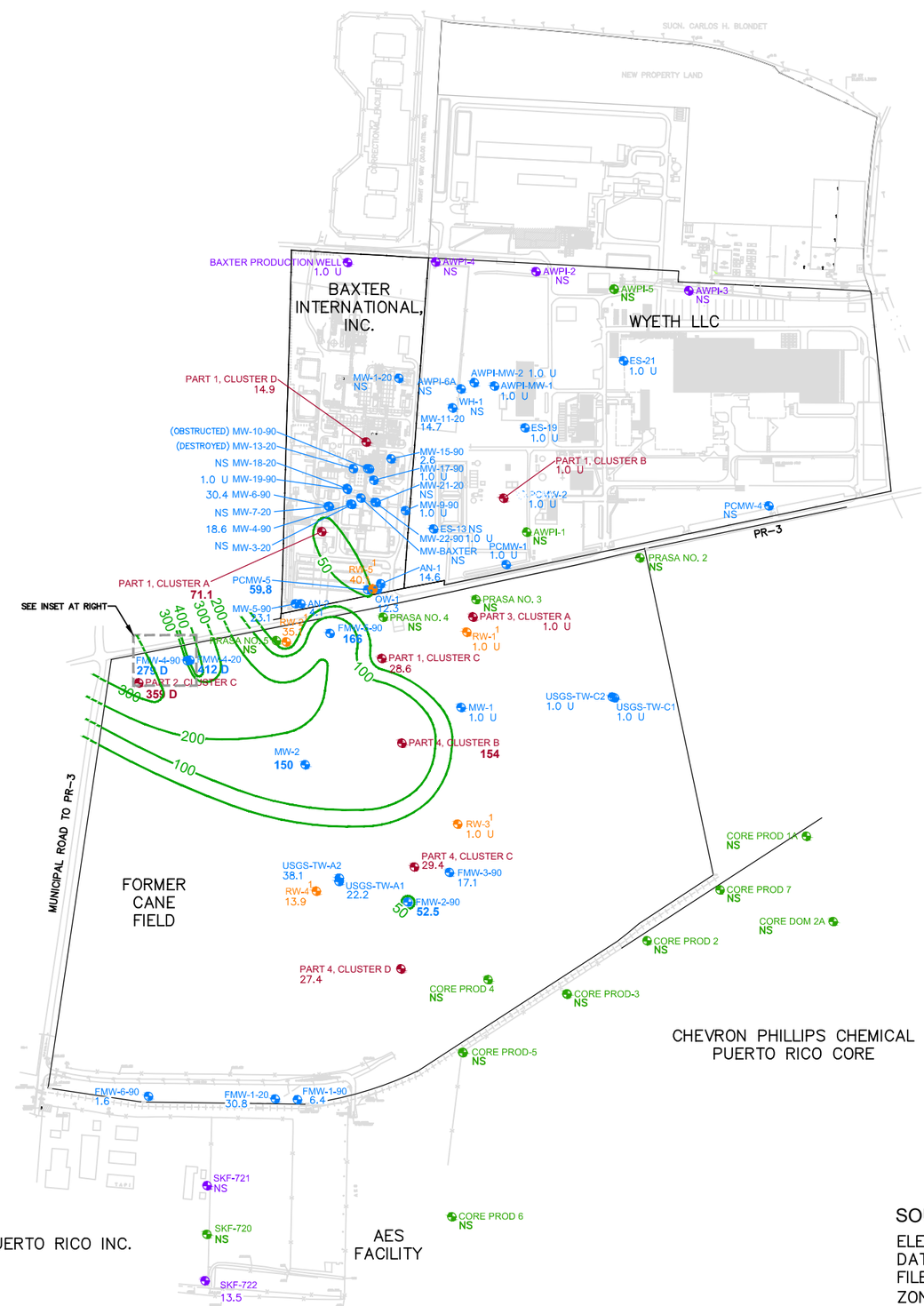

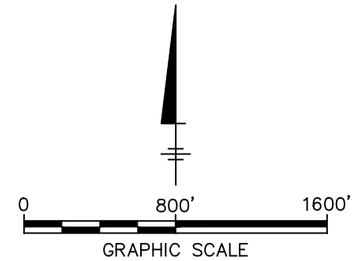

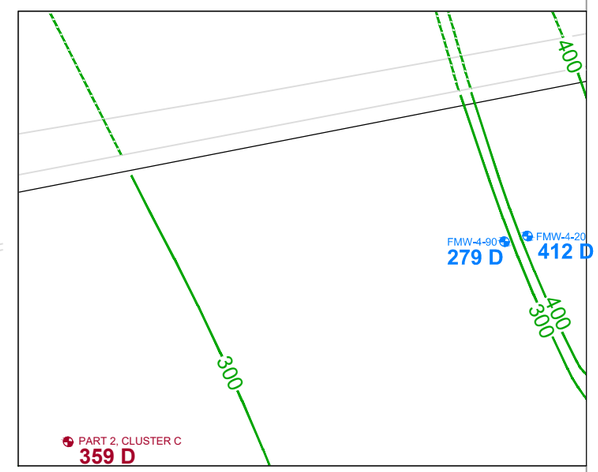

INSET

0' 100' 200'

GRAPHIC SCALE

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTE
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — ISOFLURANE ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 22.4 — ISOFLURANE GROUNDWATER CONCENTRATION (µg/L)
- **130** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- NS — NOT SAMPLED
- PR-3 — PUERTO RICO HIGHWAY 3

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2015

ISOFLURANE ISOPLETH MAP (AUG-SEPT 2015)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-5**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 12:44pm
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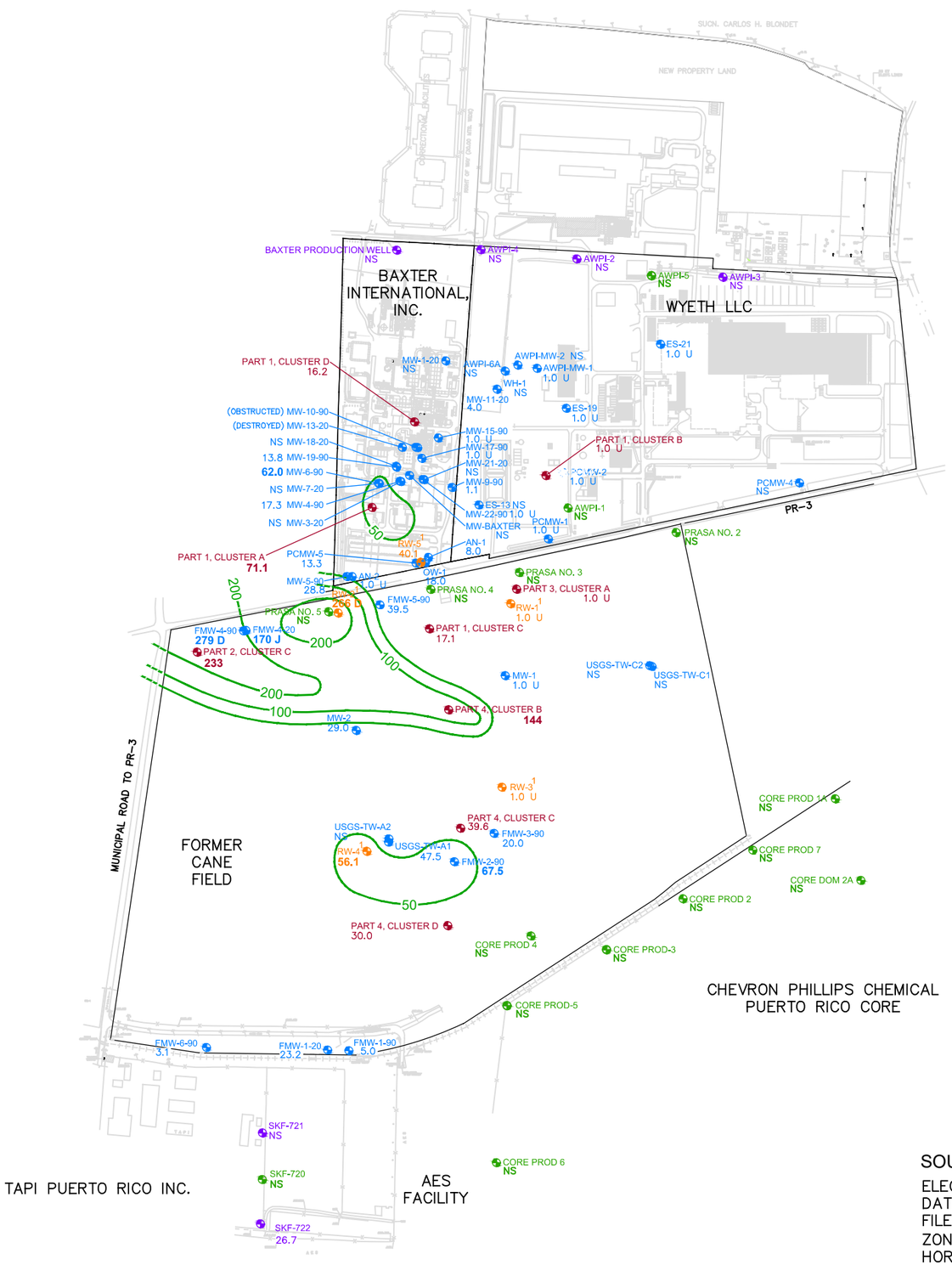

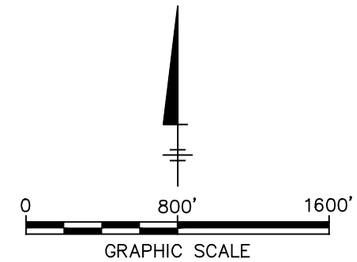

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — ISOFLURANE ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 22.4 — ISOFLURANE GROUNDWATER CONCENTRATION (µg/L)
- **130** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- NS — NOT SAMPLED
- PR-3 — PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTE
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

ISOFLURANE ISOPLETH MAP (APRIL-MAY 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-6**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 12:50pm
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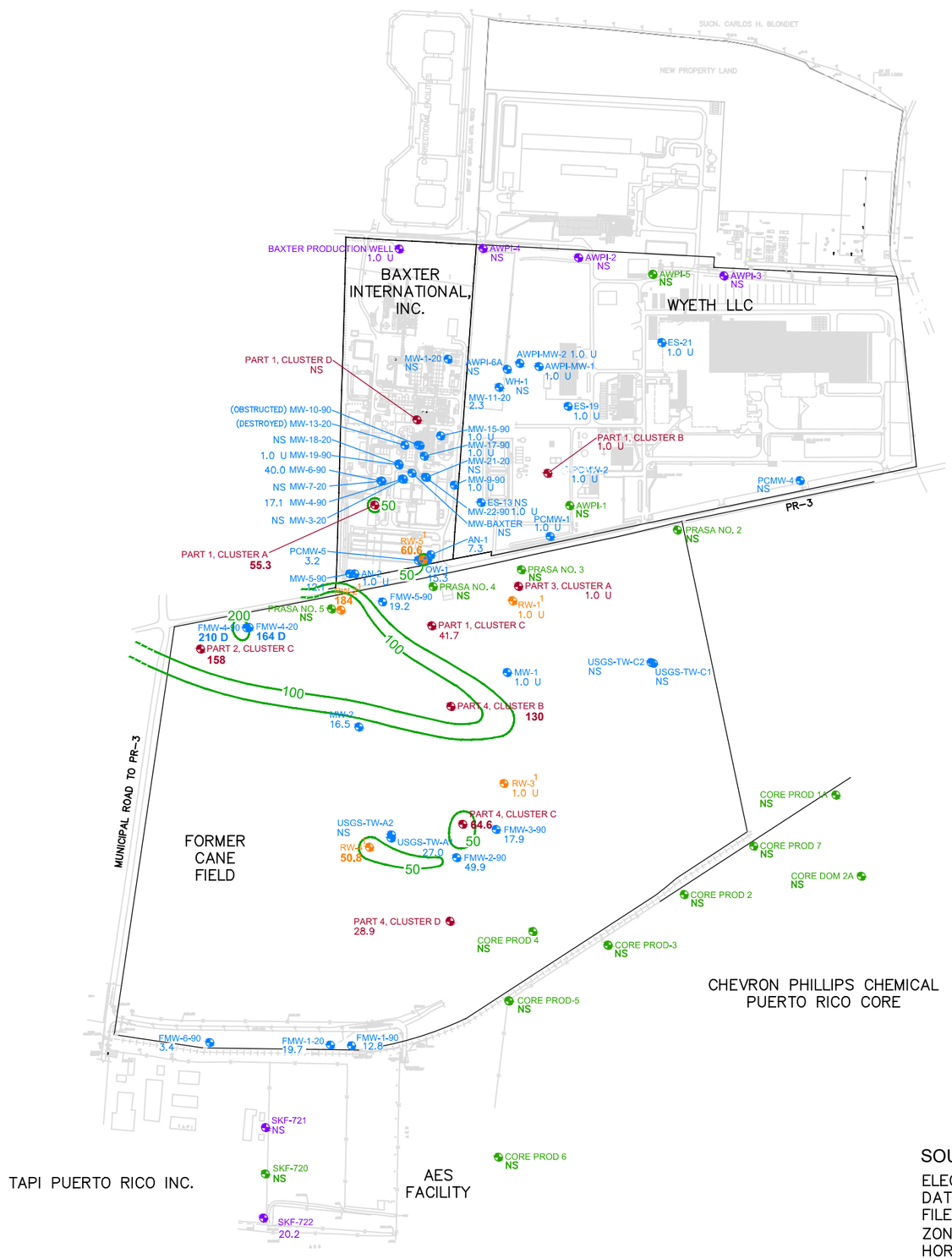

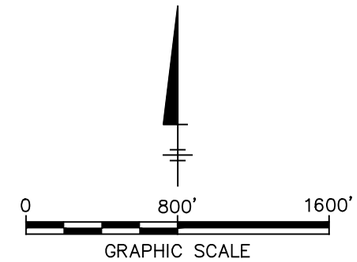

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — ISOFLURANE ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 22.4 — ISOFLURANE GROUNDWATER CONCENTRATION (µg/L)
- **130** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- NS — NOT SAMPLED
- PR-3 — PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTE
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

ISOFLURANE ISOPLETH MAP (OCTOBER-DECEMBER 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-7**

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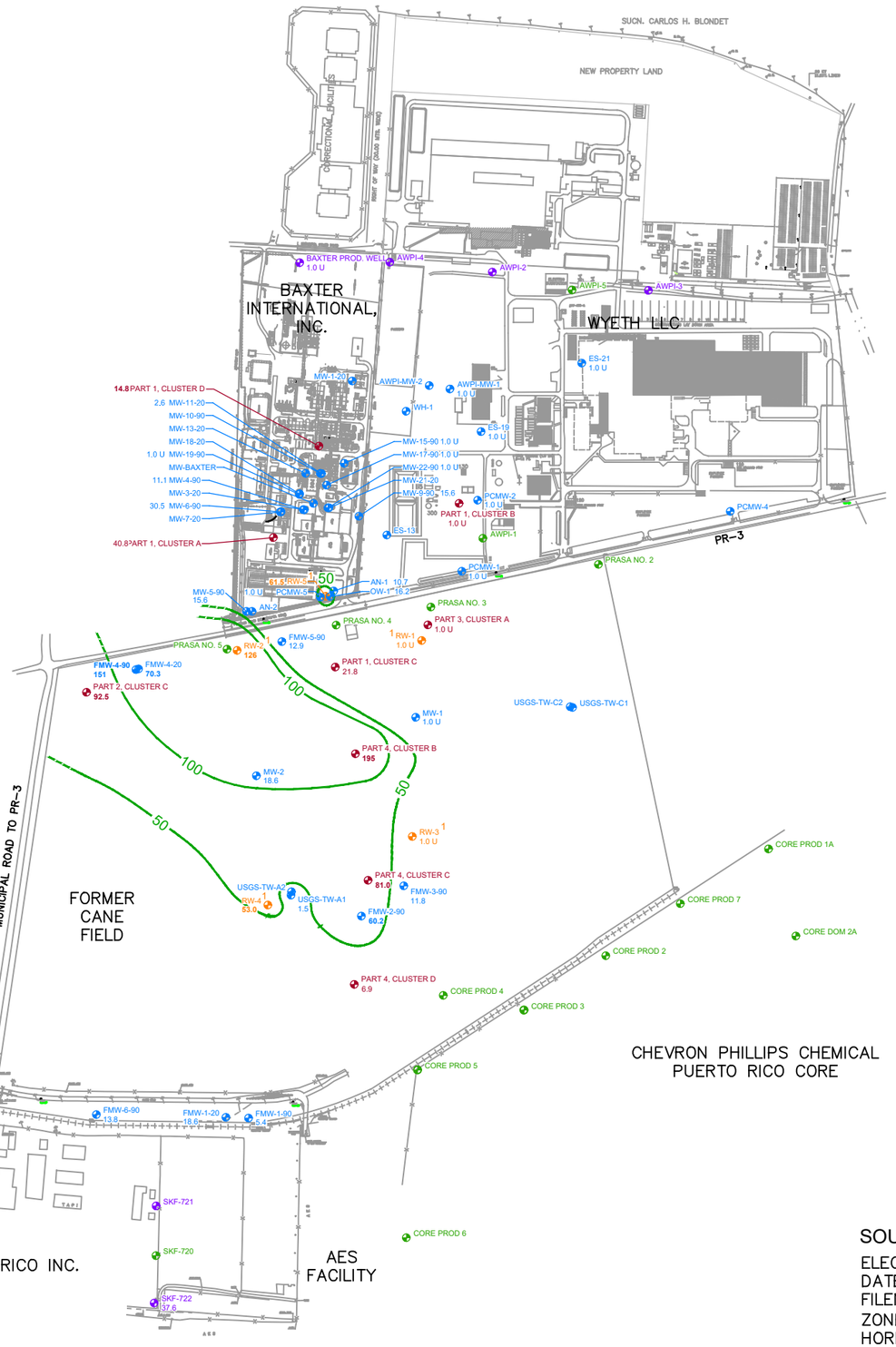

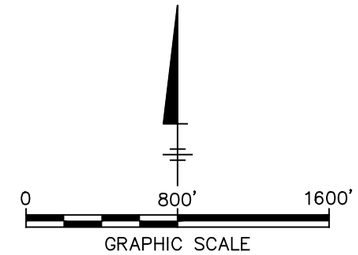

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — ISOFLURANE ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 5.5 — ISOFLURANE GROUNDWATER CONCENTRATION (µg/L)
- **14.2** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- PR-3 — PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED.
3. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS.
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS.

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

ISOFLURANE ISOPLETH MAP (MAY - JUNE 2017)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-8**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 9:16pm
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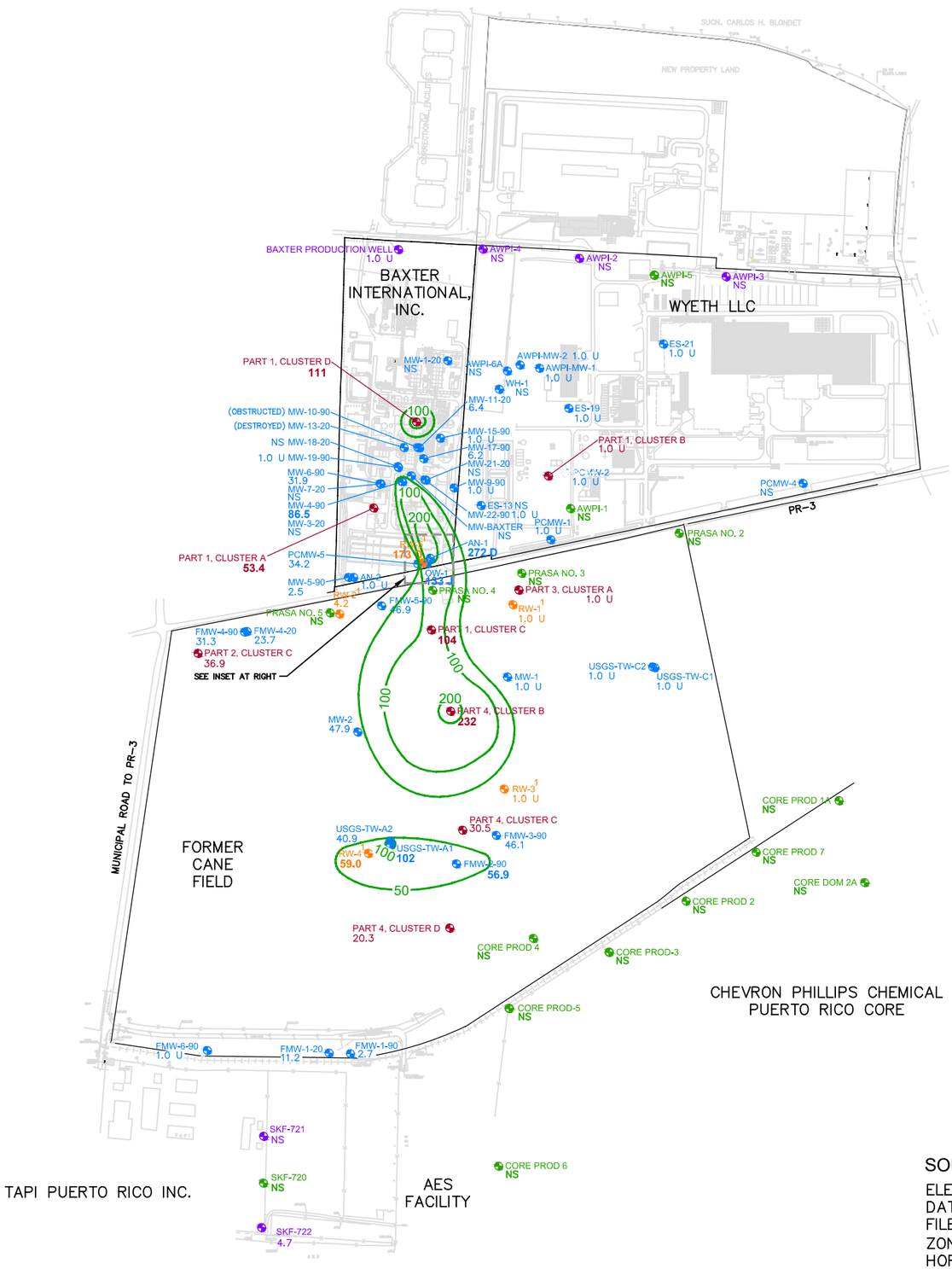

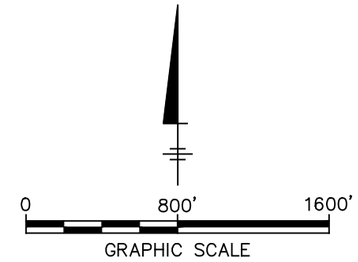

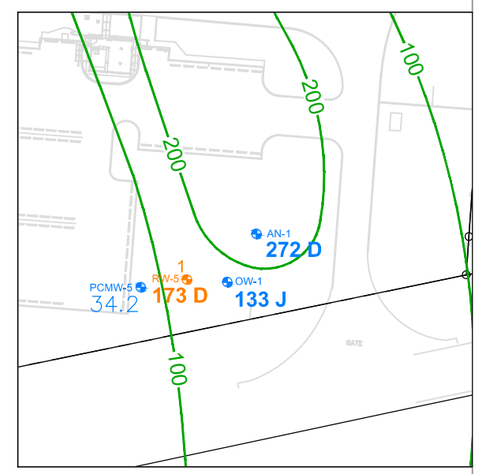

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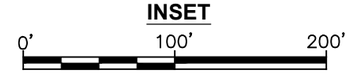

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTES
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — HALOETHER 508 ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 26.4 — HALOETHER 508 GROUNDWATER CONCENTRATION (µg/L)
- **166** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- J — THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- NS — NOT SAMPLED
- PR-3 — PUERTO RICO HIGHWAY 3

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2015

HALOETHER 508 ISOPLETH MAP (AUG-SEPT 2015)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-9**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 12:58pm
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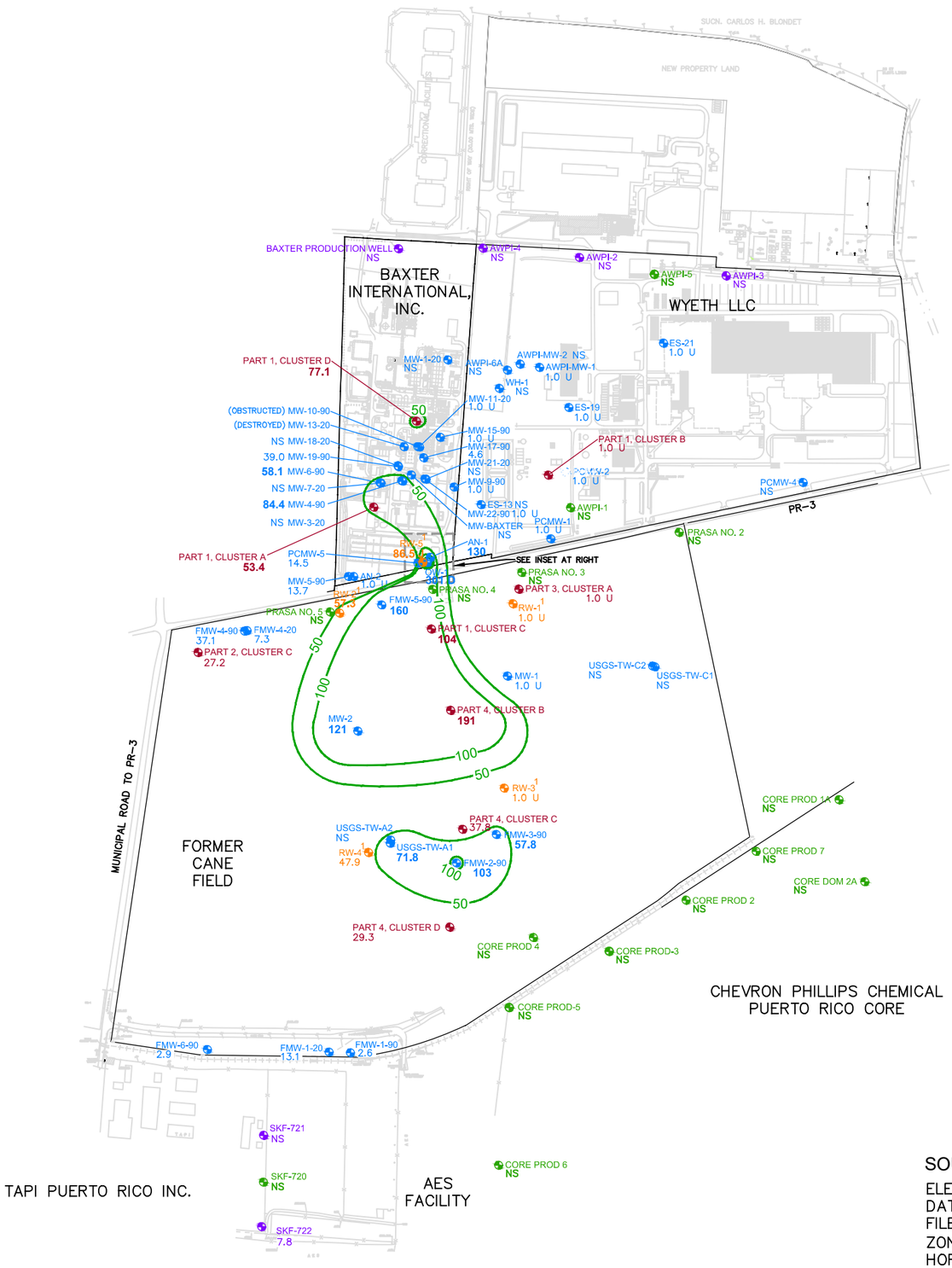
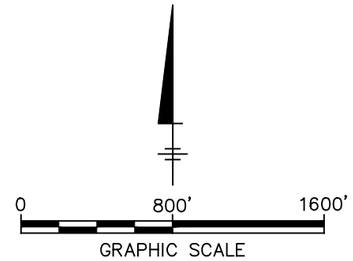
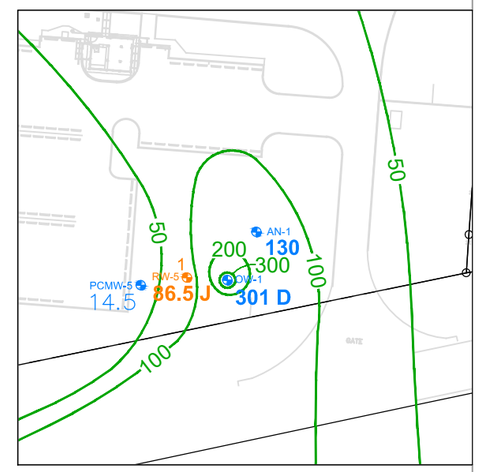
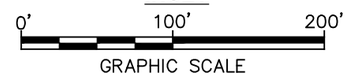






INSET



NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTES
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772–ALL–NAD83–METER–ADJUST.
ZONE: 5200–PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — HALOETHER 508 ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 26.4 — HALOETHER 508 GROUNDWATER CONCENTRATION (µg/L)
- **166** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- J — THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- NS — NOT SAMPLED
- PR–3 — PUERTO RICO HIGHWAY 3

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

HALOETHER 508 ISOPLETH MAP (APRIL-MAY 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE
C-10

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 – 1:04pm
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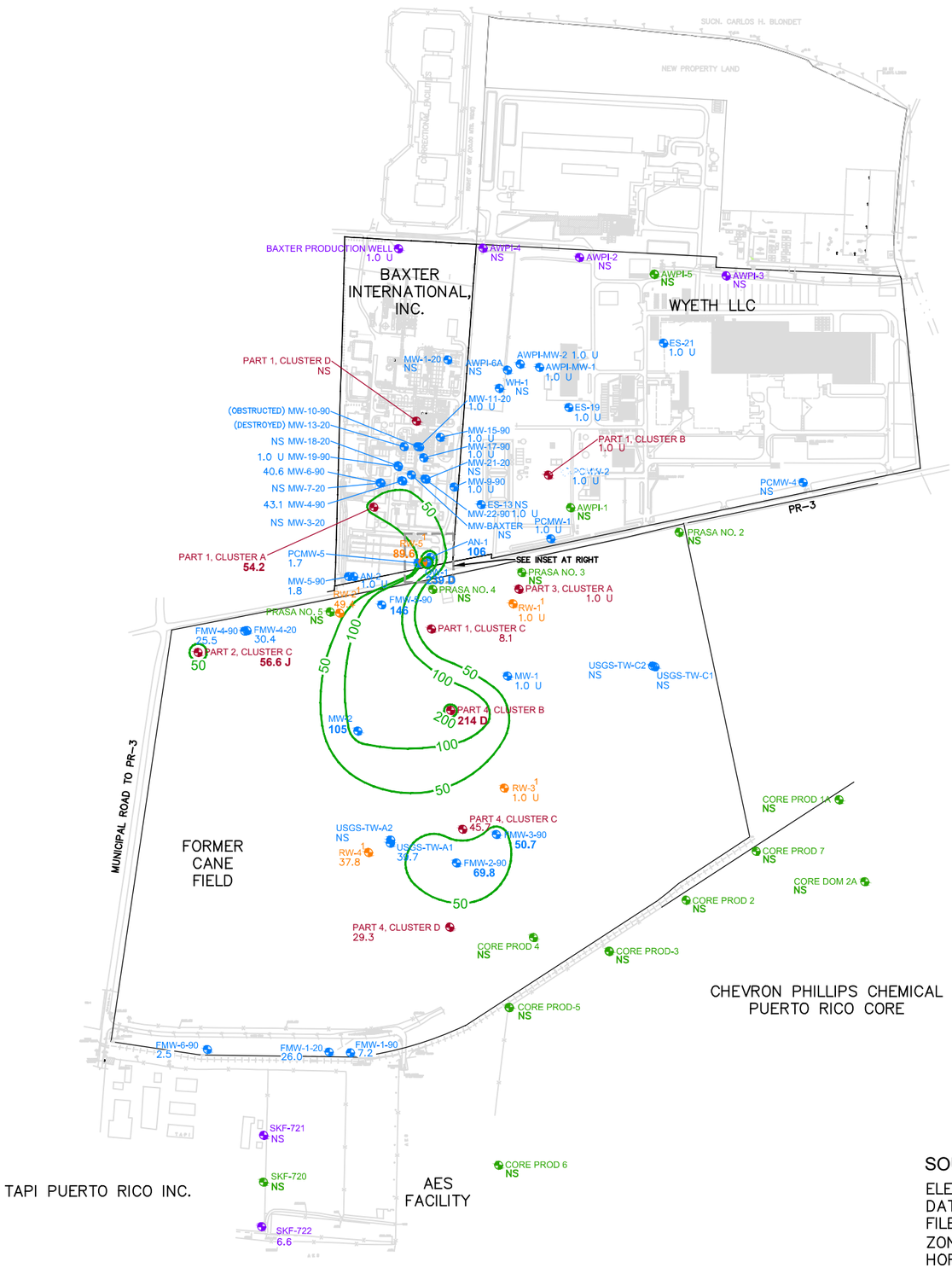

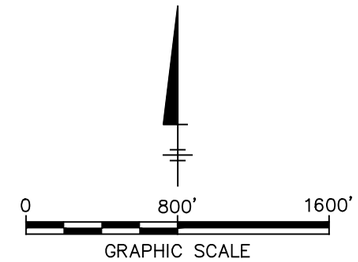

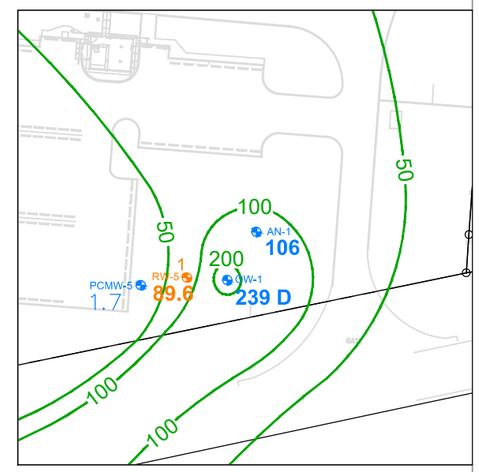

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 — HALOETHER 508 ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 26.4 — HALOETHER 508 GROUNDWATER CONCENTRATION (µg/L)
- **166** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- J — THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- NS — NOT SAMPLED
- PR-3 — PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTES
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

HALOETHER 508 ISOPLETH MAP (OCTOBER-DECEMBER 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE
C-11

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 1:09pm
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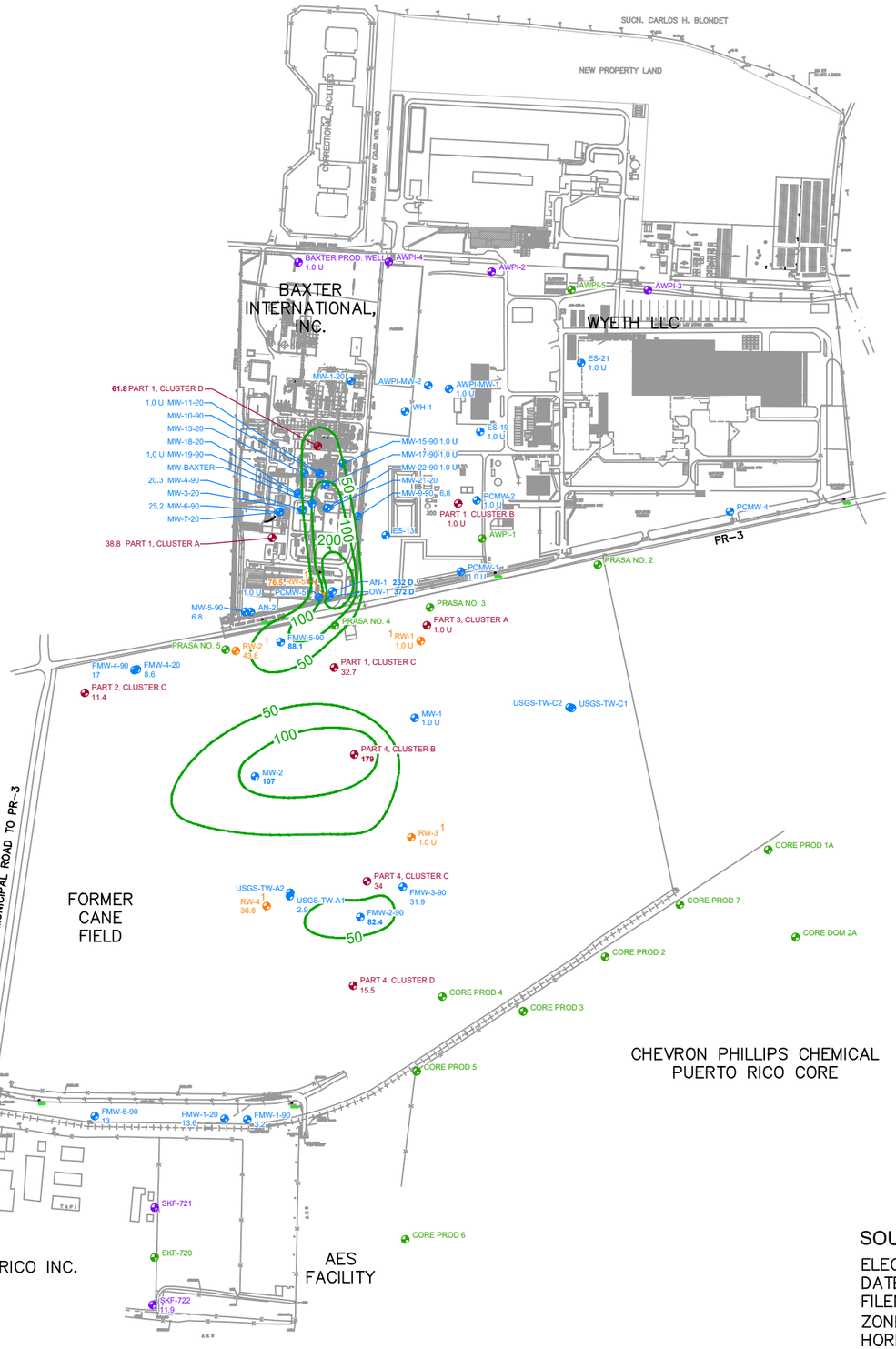

0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 50 HALOETHER 508 ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 5.5 HALOETHER 508 GROUNDWATER CONCENTRATION (µg/L)
- **14.2** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 50 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- PR-3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED.
3. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS.
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS.

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

HALOETHER 508 ISOPLETH MAP (MAY - JUNE 2017)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-12**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 9:54pm
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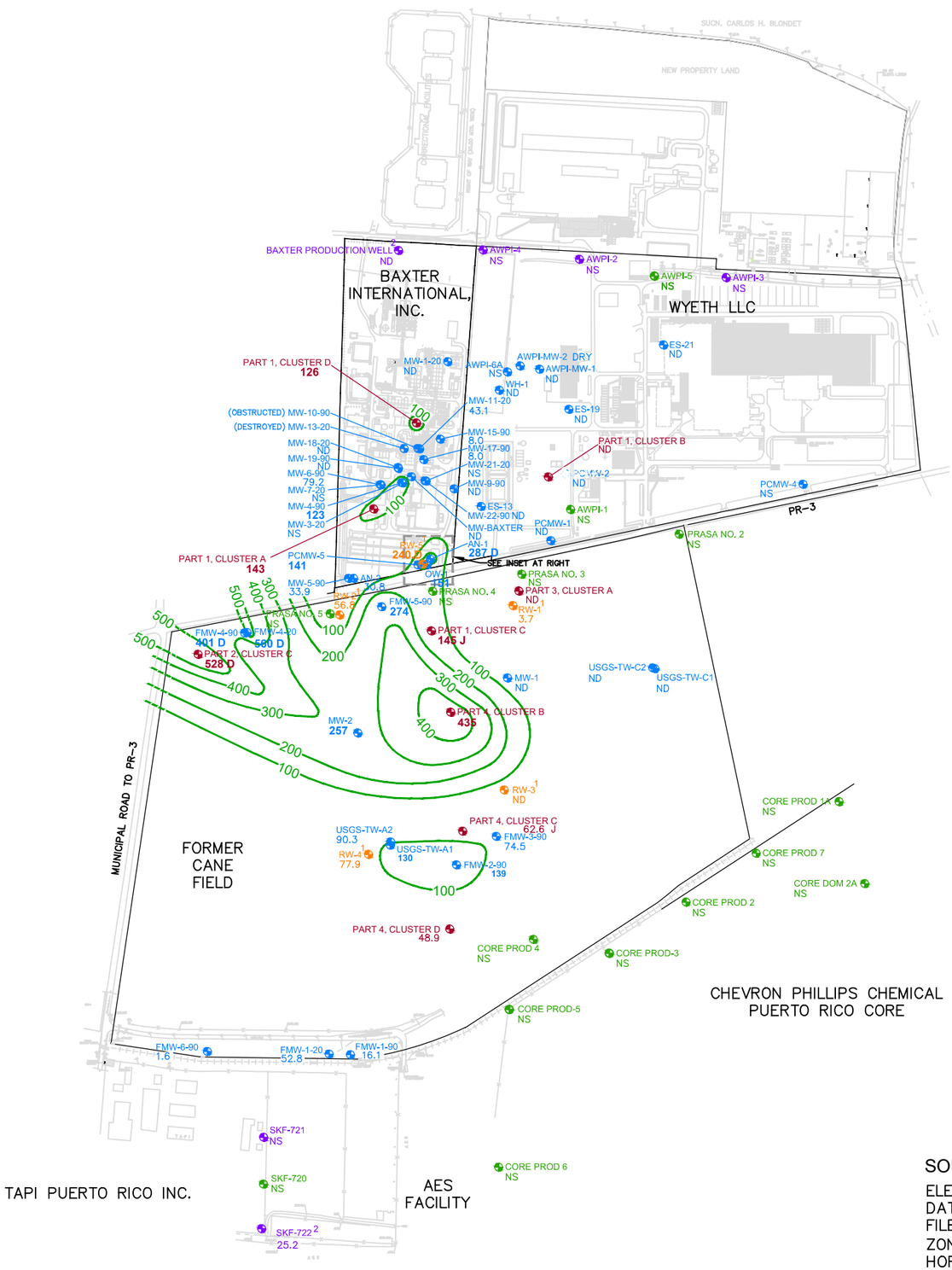

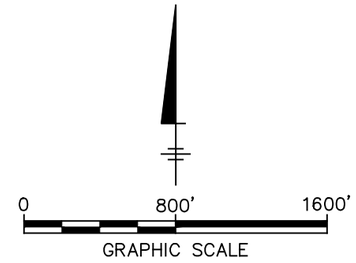

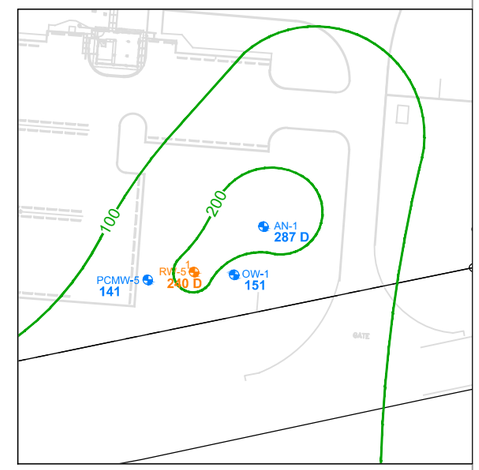

INSET

0' 100' 200'

GRAPHIC SCALE

NOTES:

1. [1] WELL NOT PURGED
2. [2] GROUNDWATER SAMPLE COLLECTED FROM PRODUCTION WELL SAMPLE SPIGOT
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTE
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 100 — TOTAL HALOETHERS ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 17.3 — TOTAL HALOETHERS GROUNDWATER CONCENTRATION (µg/L)
- **124** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 100 µg/L
- ND — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- J — THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- NS — NOT SAMPLED
- [DRY] — GROUNDWATER NOT ENCOUNTERED
- PR-3 — PUERTO RICO HIGHWAY 3

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2015

TOTAL HALOETHERS ISOPLETH MAP (AUG-SEPT 2015)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-13**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 1:13pm
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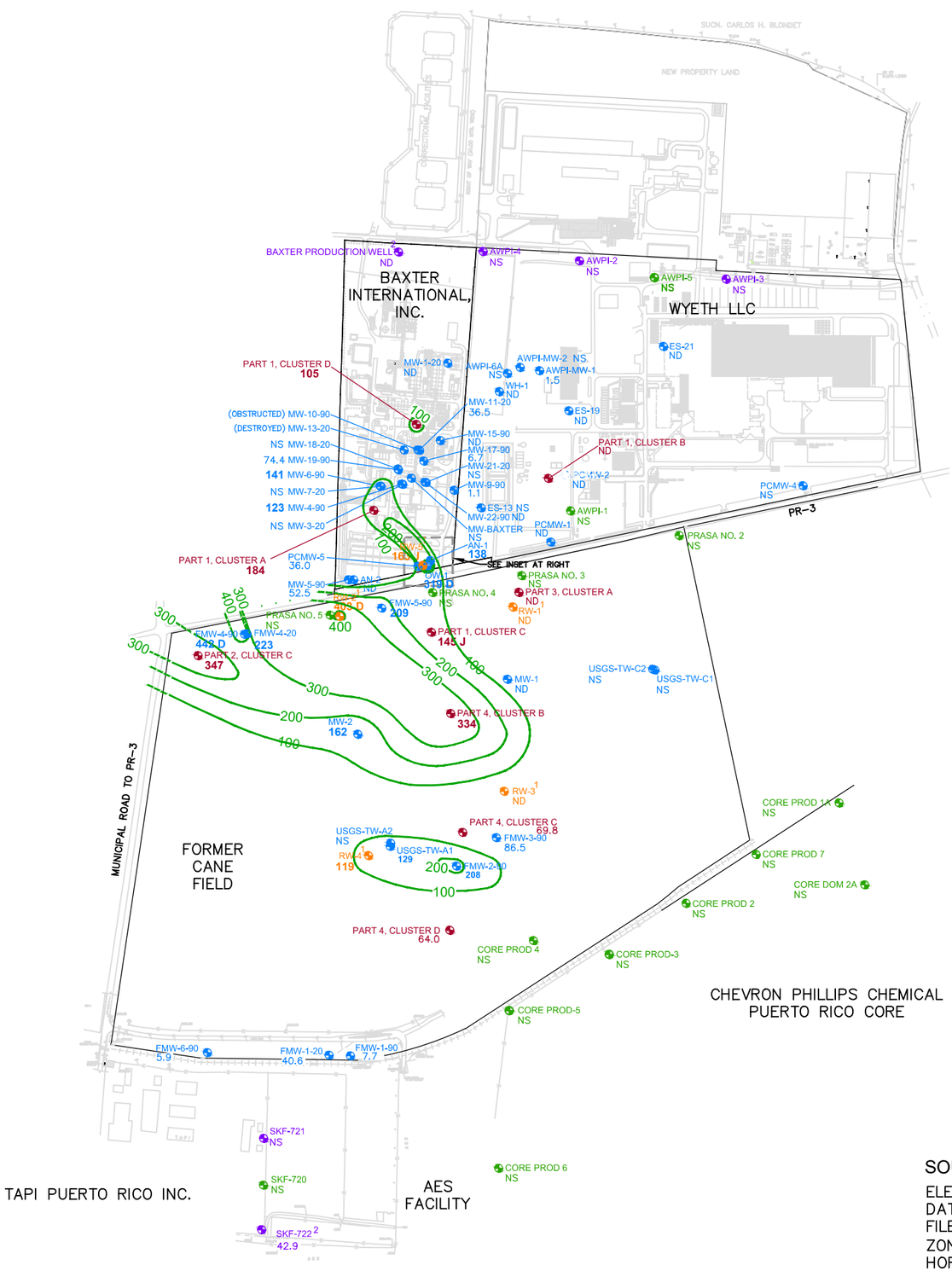

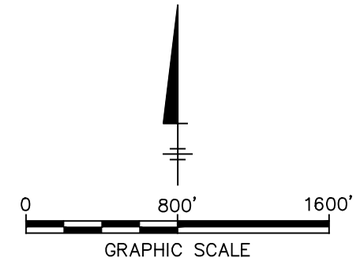

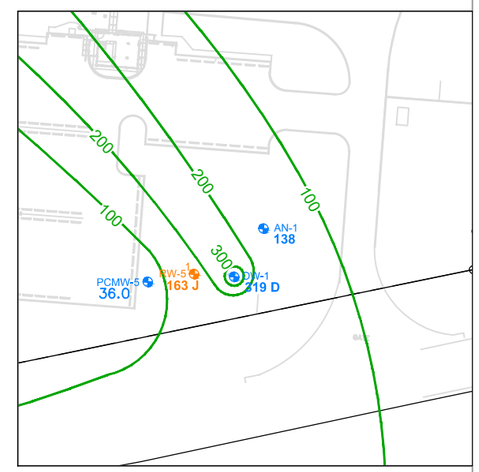

INSET

0' 100' 200'

GRAPHIC SCALE

NOTES:

1. [1] WELL NOT PURGED
2. [2] GROUNDWATER SAMPLE COLLECTED FROM PRODUCTION WELL SAMPLE SPIGOT
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTE
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 100 TOTAL HALOETHERS ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 17.3 TOTAL HALOETHERS GROUNDWATER CONCENTRATION (µg/L)
- **124** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 100 µg/L
- ND THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- J THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- NS NOT SAMPLED
- [DRY] GROUNDWATER NOT ENCOUNTERED
- PR-3 PUERTO RICO HIGHWAY 3

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

TOTAL HALOETHERS ISOPLETH MAP (APRIL-MAY 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-14**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 1:19pm
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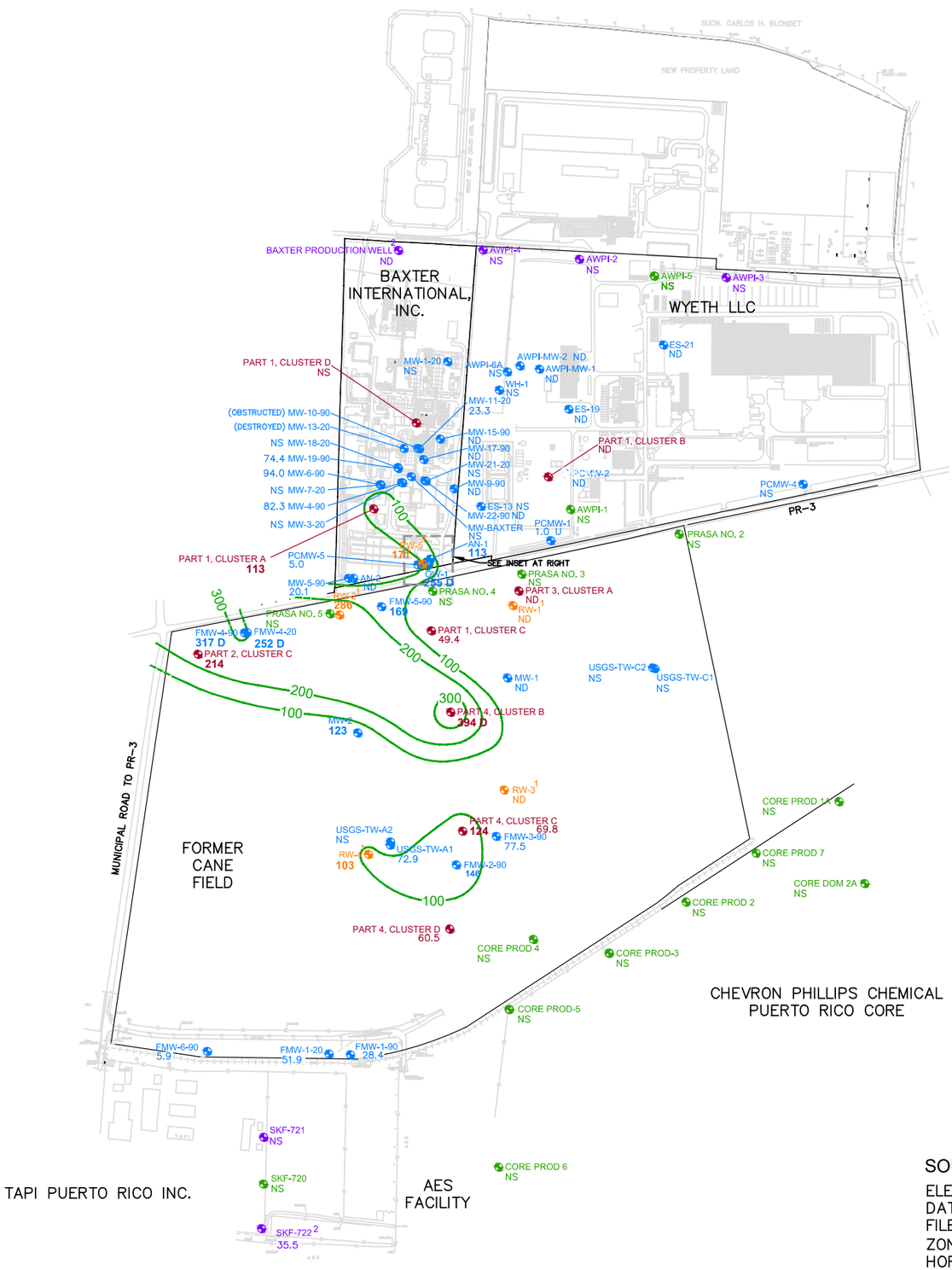
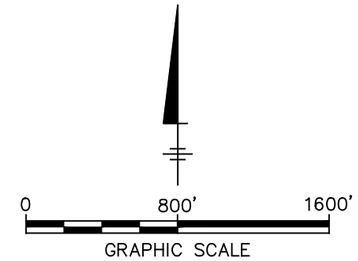
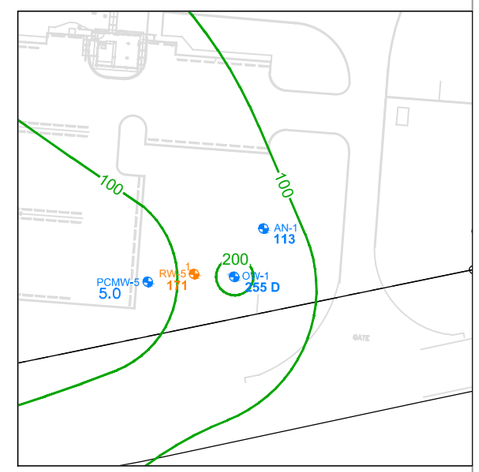
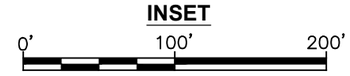






INSET



NOTES:

1. [1] WELL NOT PURGED
2. [2] GROUNDWATER SAMPLE COLLECTED FROM PRODUCTION WELL SAMPLE SPIGOT
3. LABORATORY QUALIFIER **D**: SAMPLE WAS DILUTED DUE TO THE PRESENCE OF HIGH LEVELS OF TARGET ANALYTE
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC. DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 100 — TOTAL HALOETHERS ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 17.3 — TOTAL HALOETHERS GROUNDWATER CONCENTRATION (µg/L)
- **124** — CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 100 µg/L
- ND — THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- J — THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- NS — NOT SAMPLED
- [DRY] — GROUNDWATER NOT ENCOUNTERED
- PR-3 — PUERTO RICO HIGHWAY 3

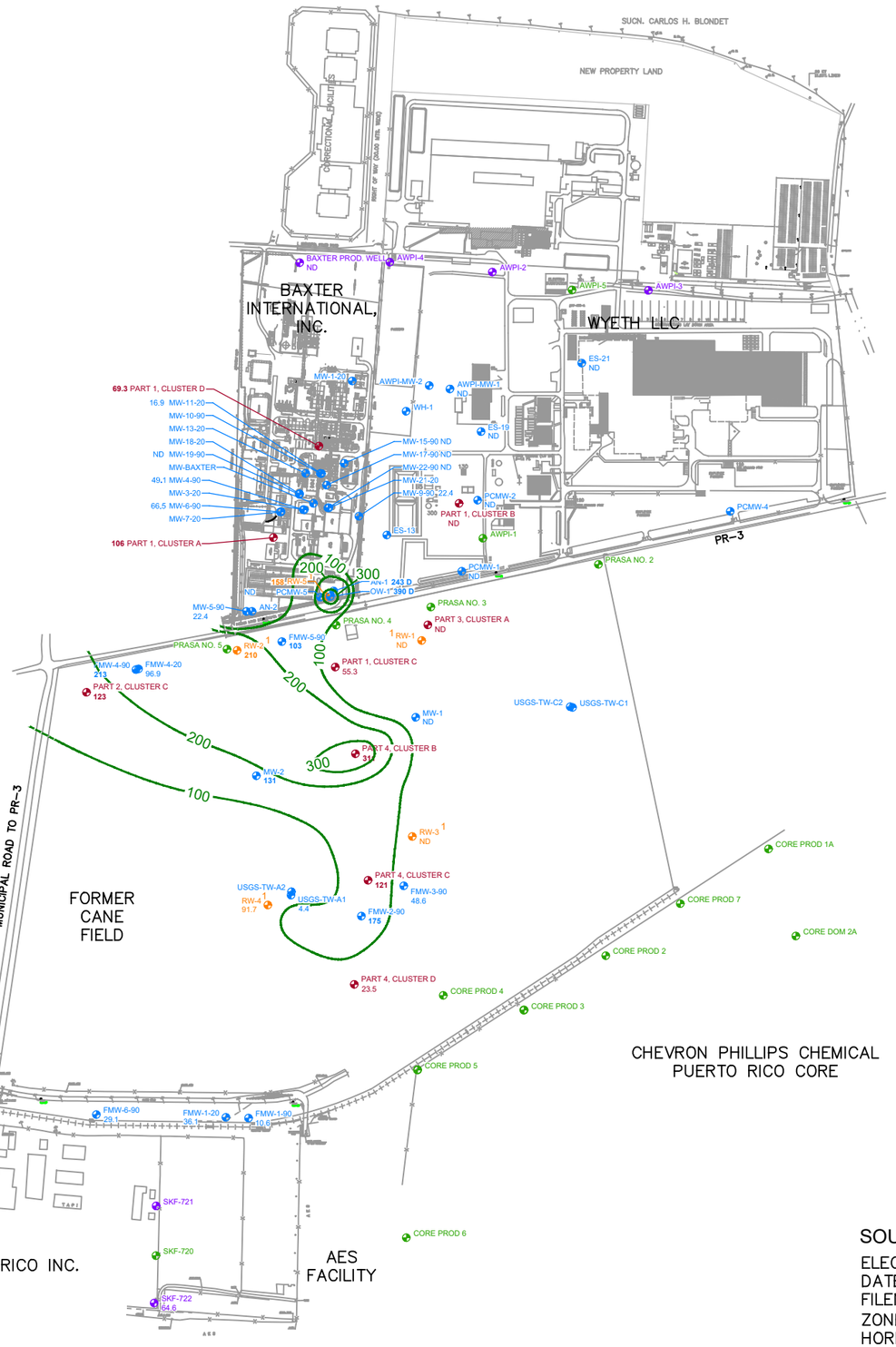
FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2016

TOTAL HALOETHERS ISOPLETH MAP (OCTOBER-DECEMBER 2016)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-15**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 1:23pm
User Name : ekrahmer Path\Name : C:\ENV\ENV\PROJ\Fibers, Puerto Rico\CAD\2SAR2017\C-15 2SAR2016 TTLHALO.dwg



0 800' 1600'

GRAPHIC SCALE

LEGEND:

- FIBERS SITE BOUNDARY
- FENCE
- ROAD
- ELECTRIC POLE
- LAMP POLE
- SWALE
- DIRT ROAD
- RAILROAD TRACKS
- GROUNDWATER MONITOR WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITOR CLUSTER WELL
- GROUNDWATER PRODUCTION WELL
- GROUNDWATER PRODUCTION WELL NOT IN USE
- 100 TOTAL HALOETHERS ISOCONTOUR WITH GROUNDWATER CONCENTRATION (MICROGRAMS PER LITER [µg/L]) DASHED WHERE INFERRED
- 55.3 TOTAL HALOETHERS GROUNDWATER CONCENTRATION (µg/L)
- **311** CONCENTRATION EXCEEDS GROUNDWATER CLEANUP CRITERIA (GWCC) OF 100 µg/L
- U THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED AT THE REPORTING LIMIT OR METHOD DETECTION LIMIT INDICATED
- PR-3 PUERTO RICO HIGHWAY 3

NOTES:

1. [1] WELL NOT PURGED
2. IF NO DATA REPORTED, WELL WAS NOT SAMPLED.
3. LABORATORY QUALIFIER **D**: CONCENTRATION IS BASED ON A DILUTED SAMPLE ANALYSIS.
4. CLUSTER WELL VALUE DENOTES HIGHEST CONCENTRATION DETECTED WITHIN CLUSTER WELLS.

SOURCES:

ELECTRONIC FILE FROM CARIBBEAN AERIAL SURVEYS, INC.
DATED MARCH 2011.
FILENAME: 2772-ALL-NAD83-METER-ADJUST.
ZONE: 5200-PUERTO RICO/VIRGIN ISLANDS
HORIZONTAL DATUM: STATE PLANES NAD83 U.S. SURVEY FEET
VERTICAL DATUM: NGVD29

FIBERS PUBLIC SUPPLY WELLS SUPERFUND SITE
GUAYAMA, PUERTO RICO
FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT FOR 2017

TOTAL HALOETHERS ISOPLETH MAP (MAY - JUNE 2017)

ARCADIS Design & Consultancy for natural and built assets

FIGURE **C-16**

Acad Version : R21.0s (LMS Tech) Date\Time : Wed, 04 Apr 2018 - 10:32pm
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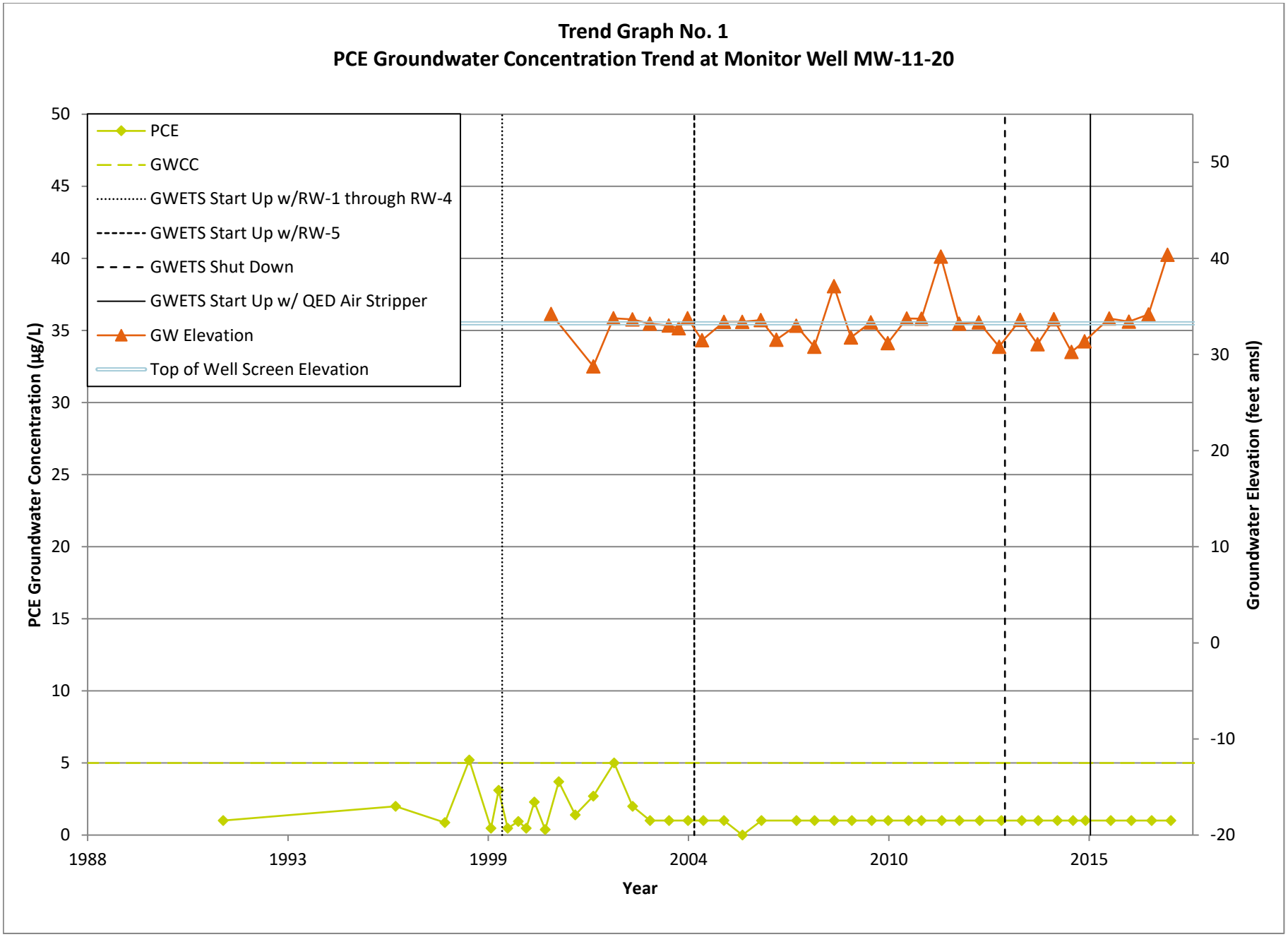
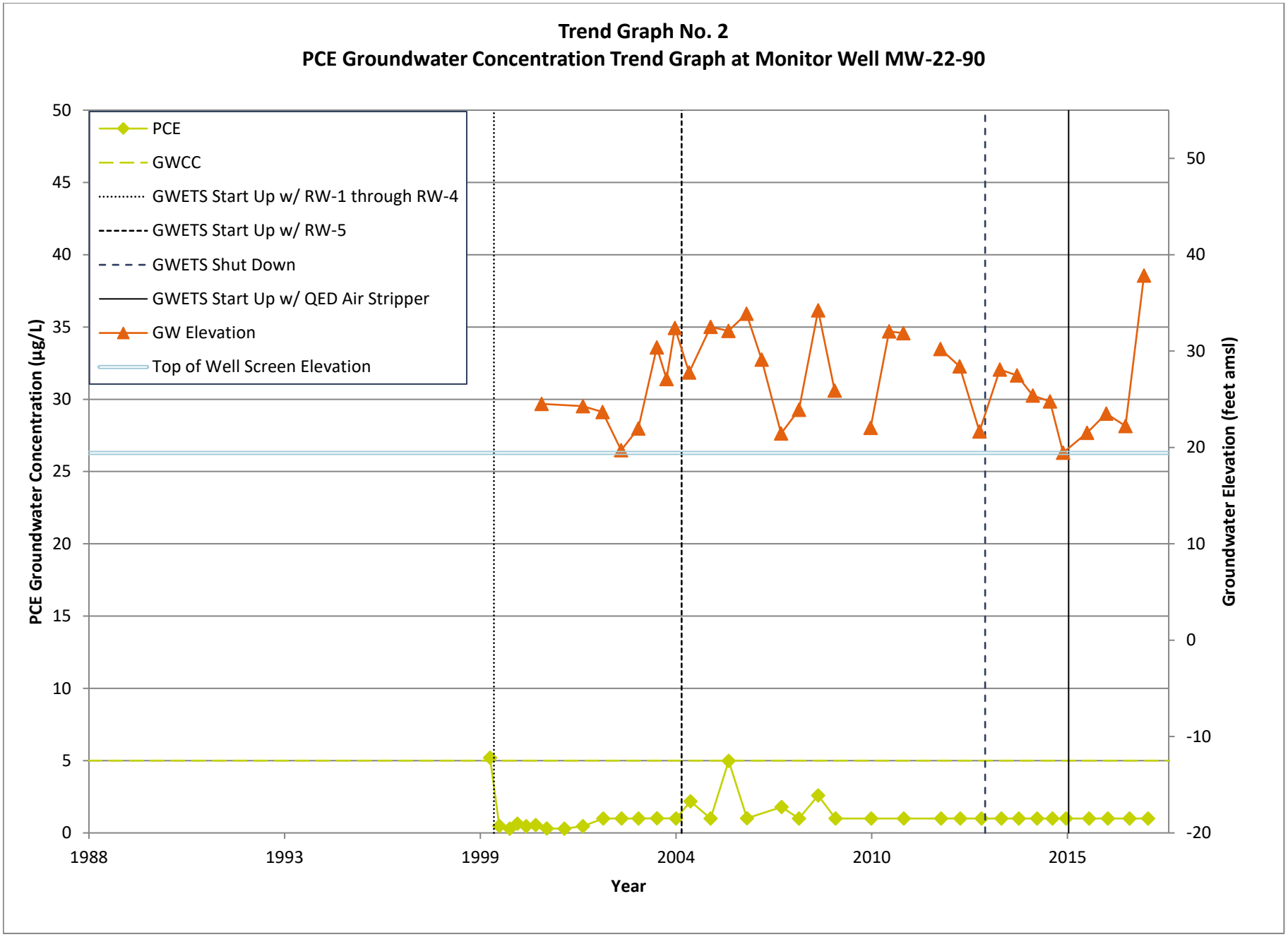
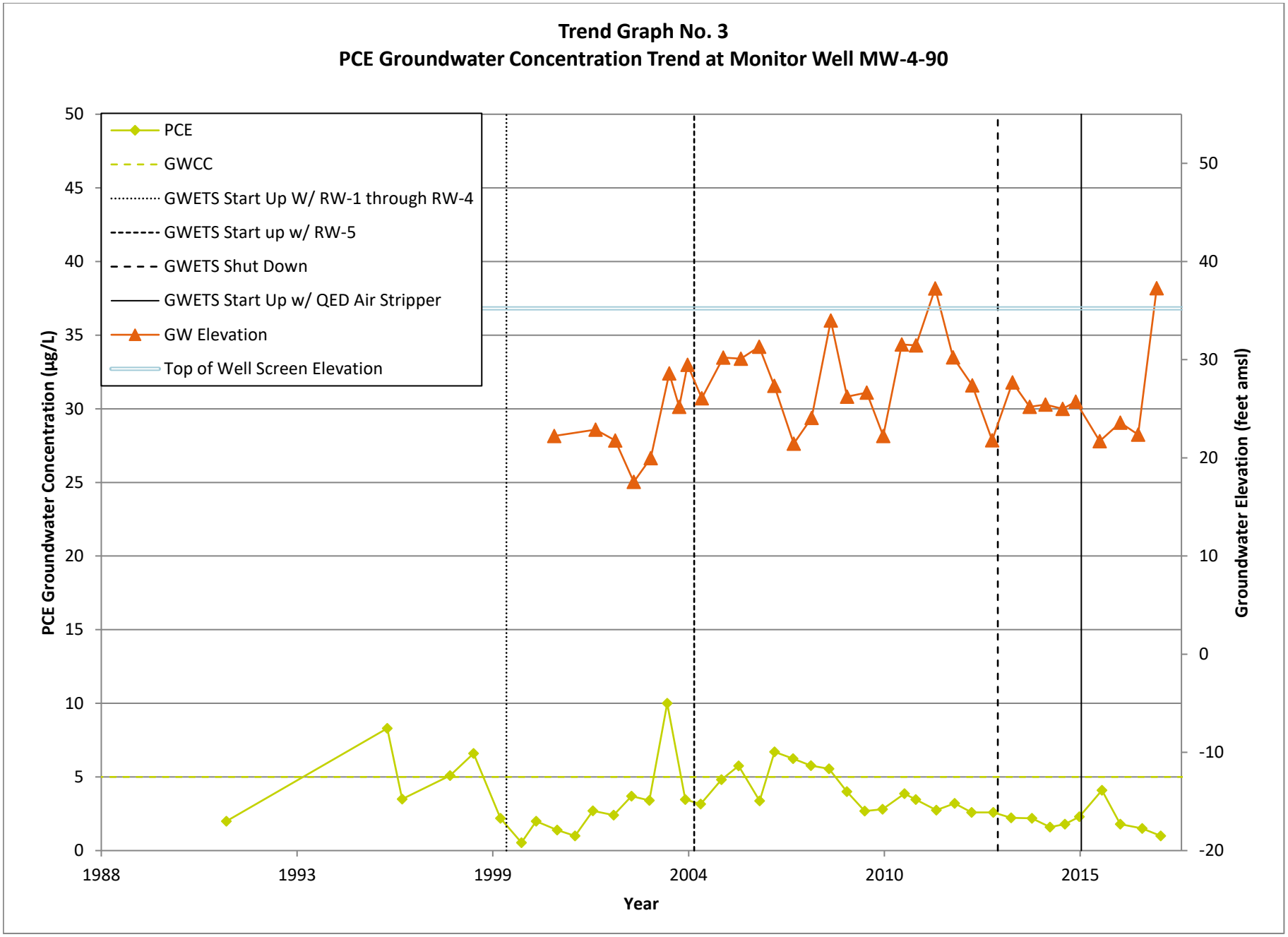
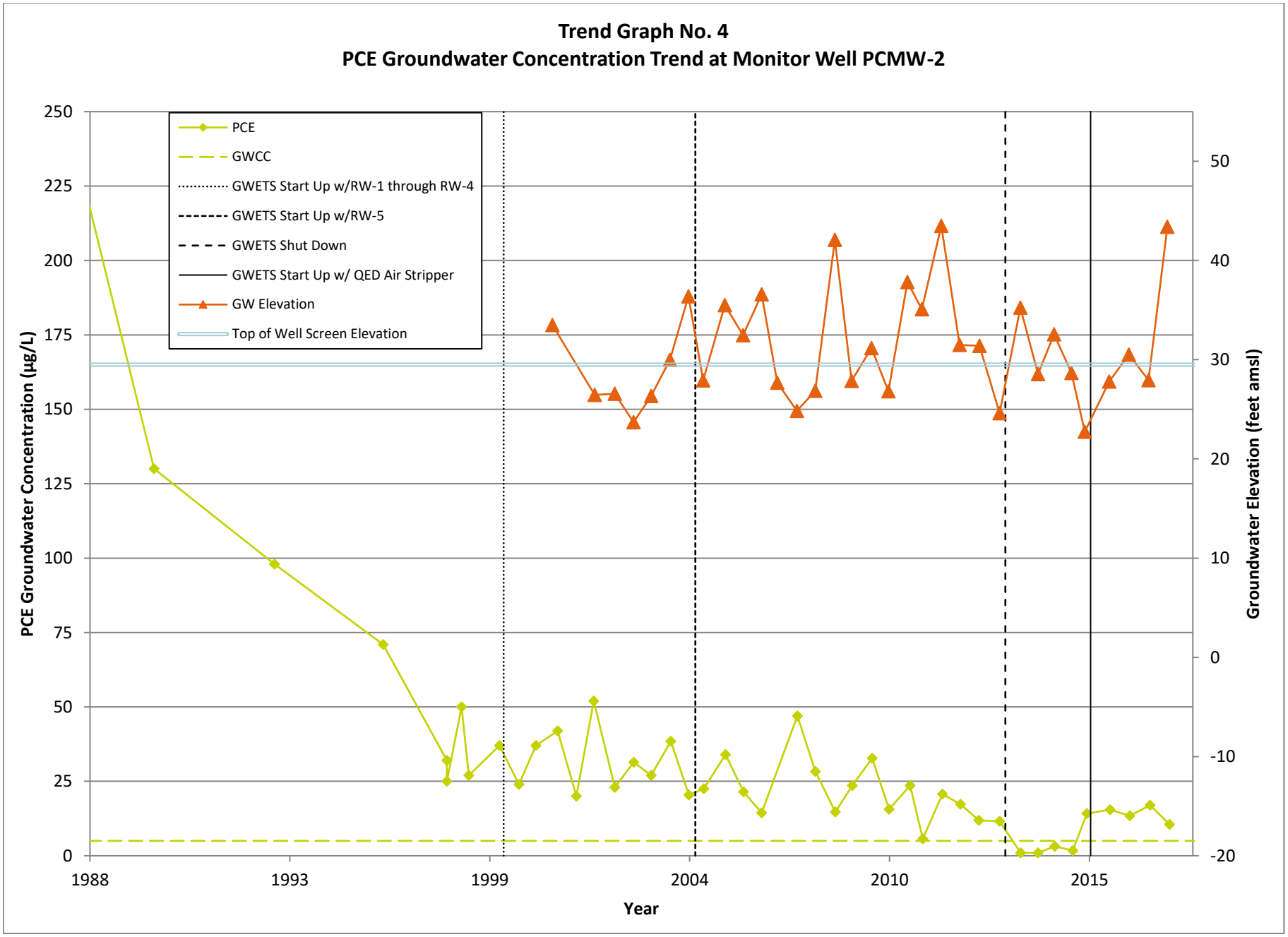
APPENDIX D

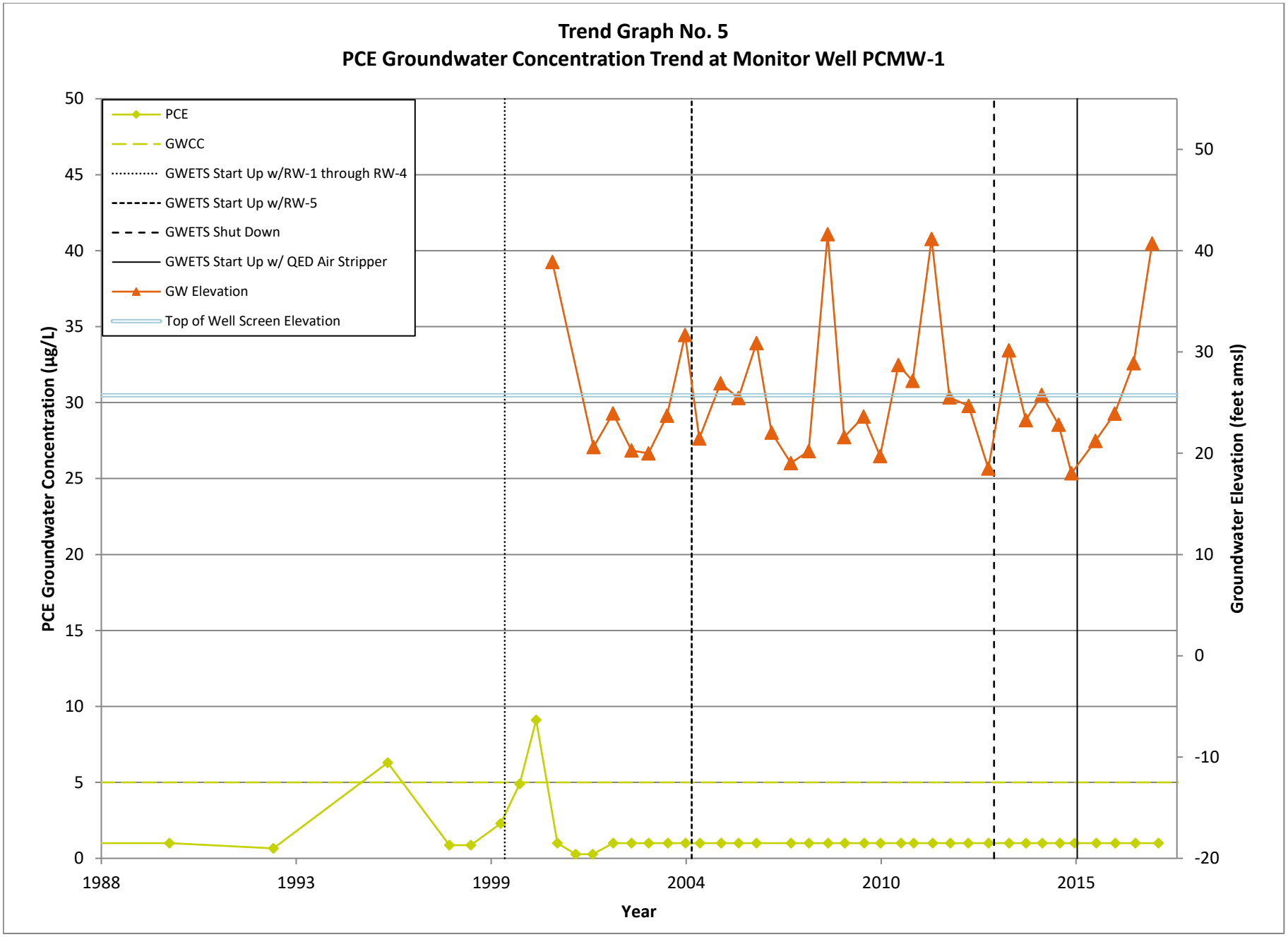
PCE and Haloethers Groundwater Concentration Time Trend Graphs (on CD)

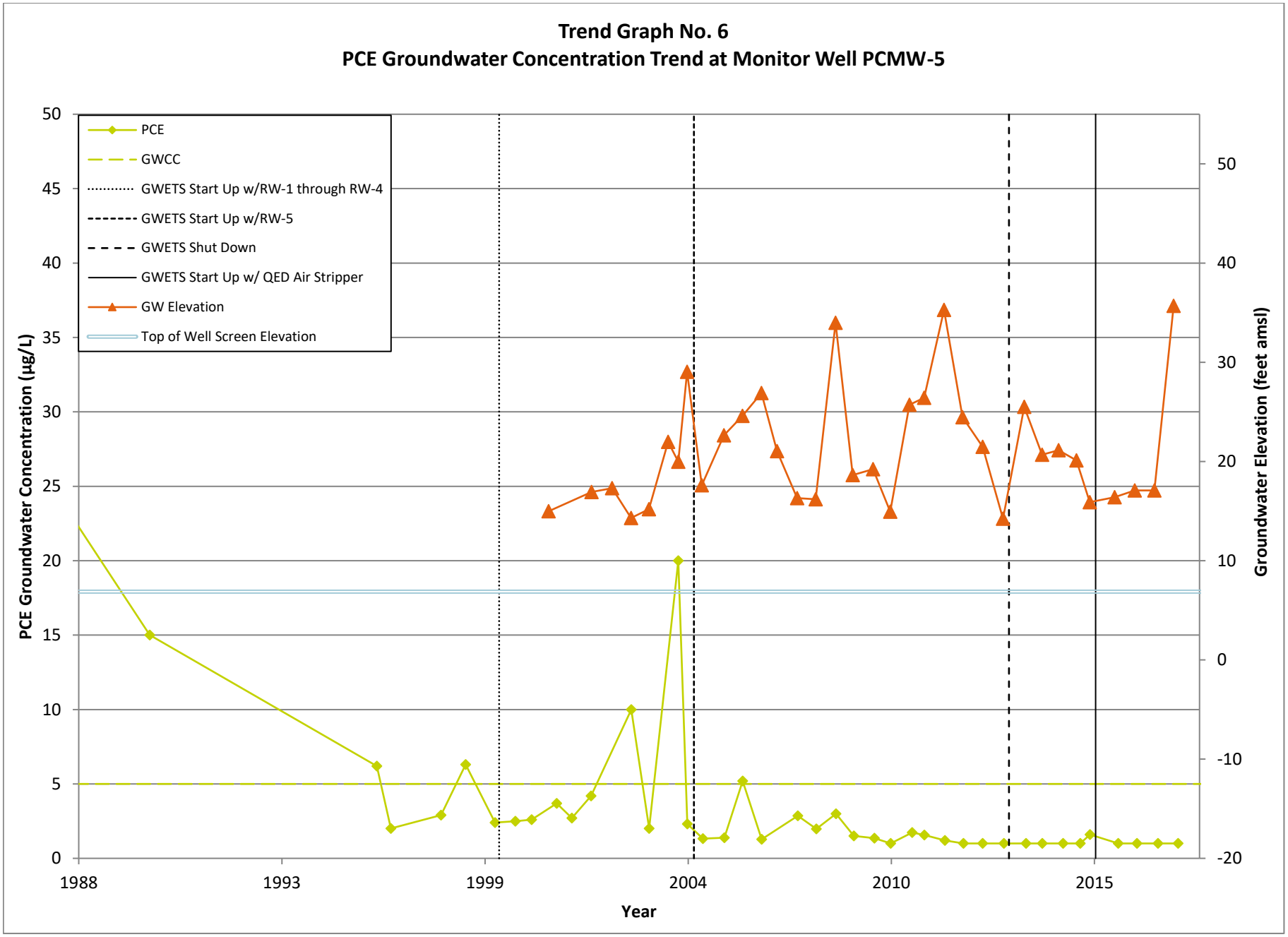

Trend Graph No. 1
PCE Groundwater Concentration Trend at Monitor Well MW-11-20
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
-10
-20
1988
1993
1999
2004
2010
2015

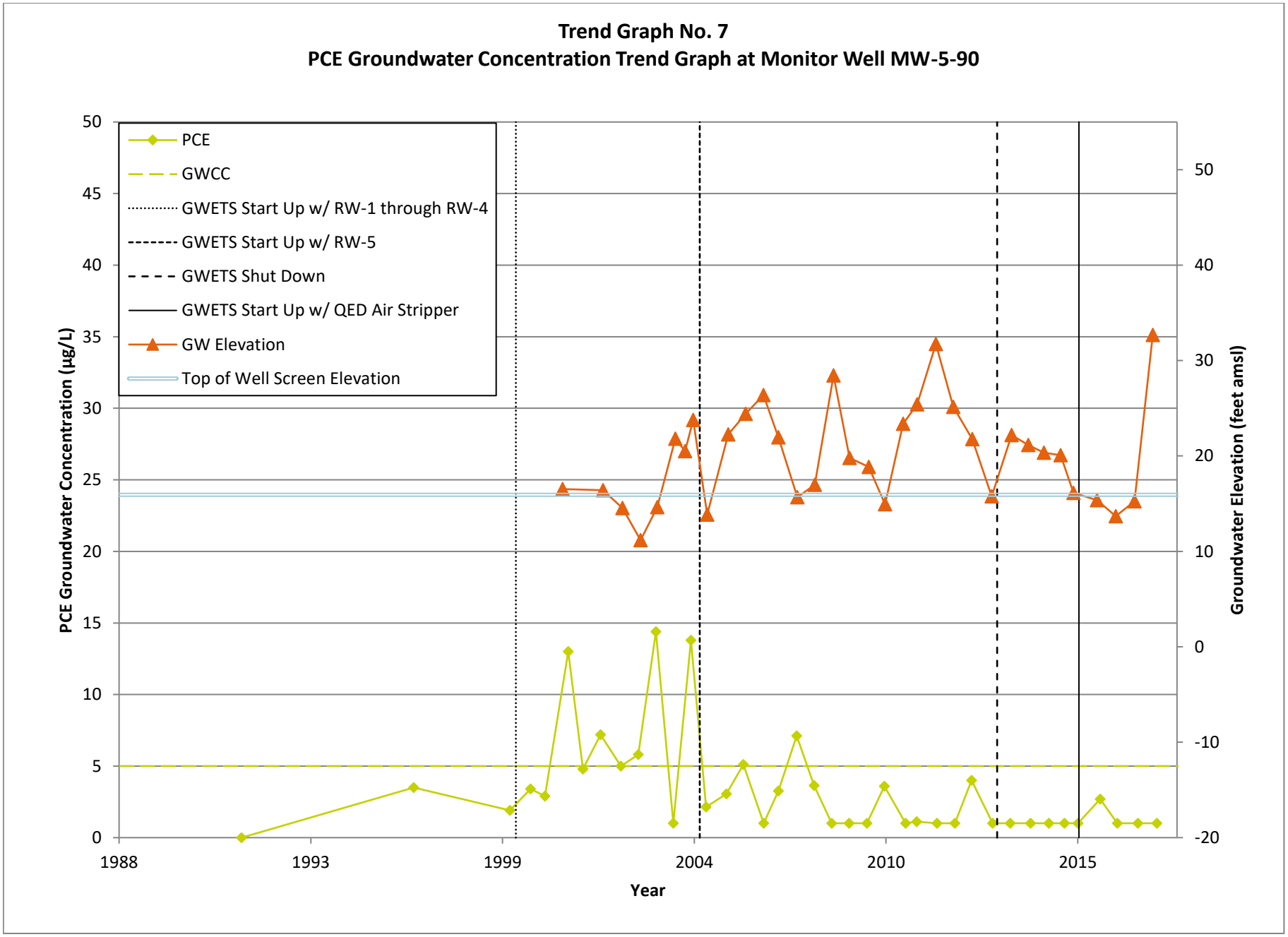

Trend Graph No. 2
PCE Groundwater Concentration Trend Graph at Monitor Well MW-22-90
PCE
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
-10
-20
1988
1993
1999
2004
2010
2015

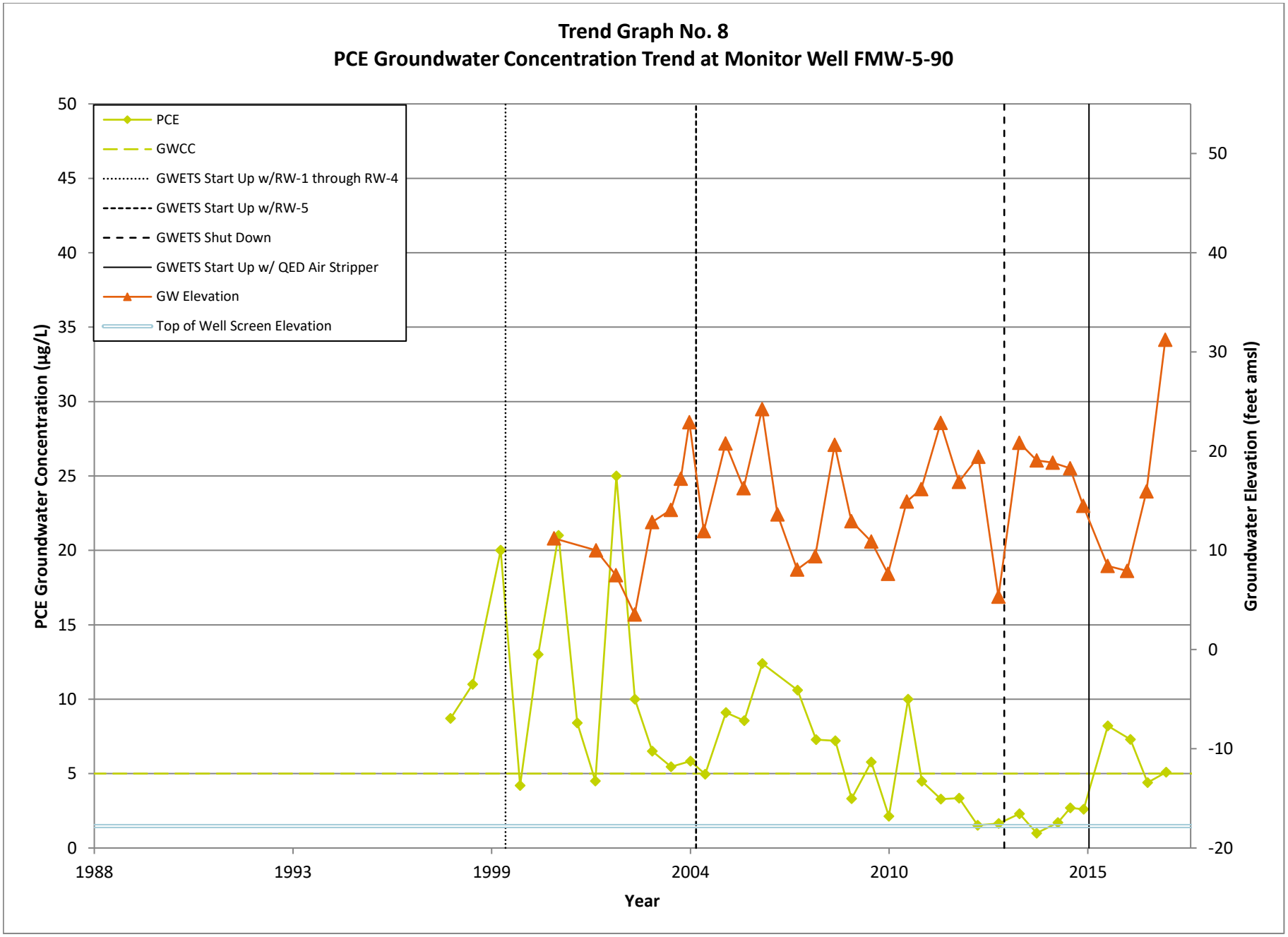

Trend Graph No. 3
PCE Groundwater Concentration Trend at Monitor Well MW-4-90
PCE
GWCC
GWETS Start Up W/ RW-1 through RW-4
GWETS Start up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
-10
-20
1988
1993
1999
2004
2010
2015

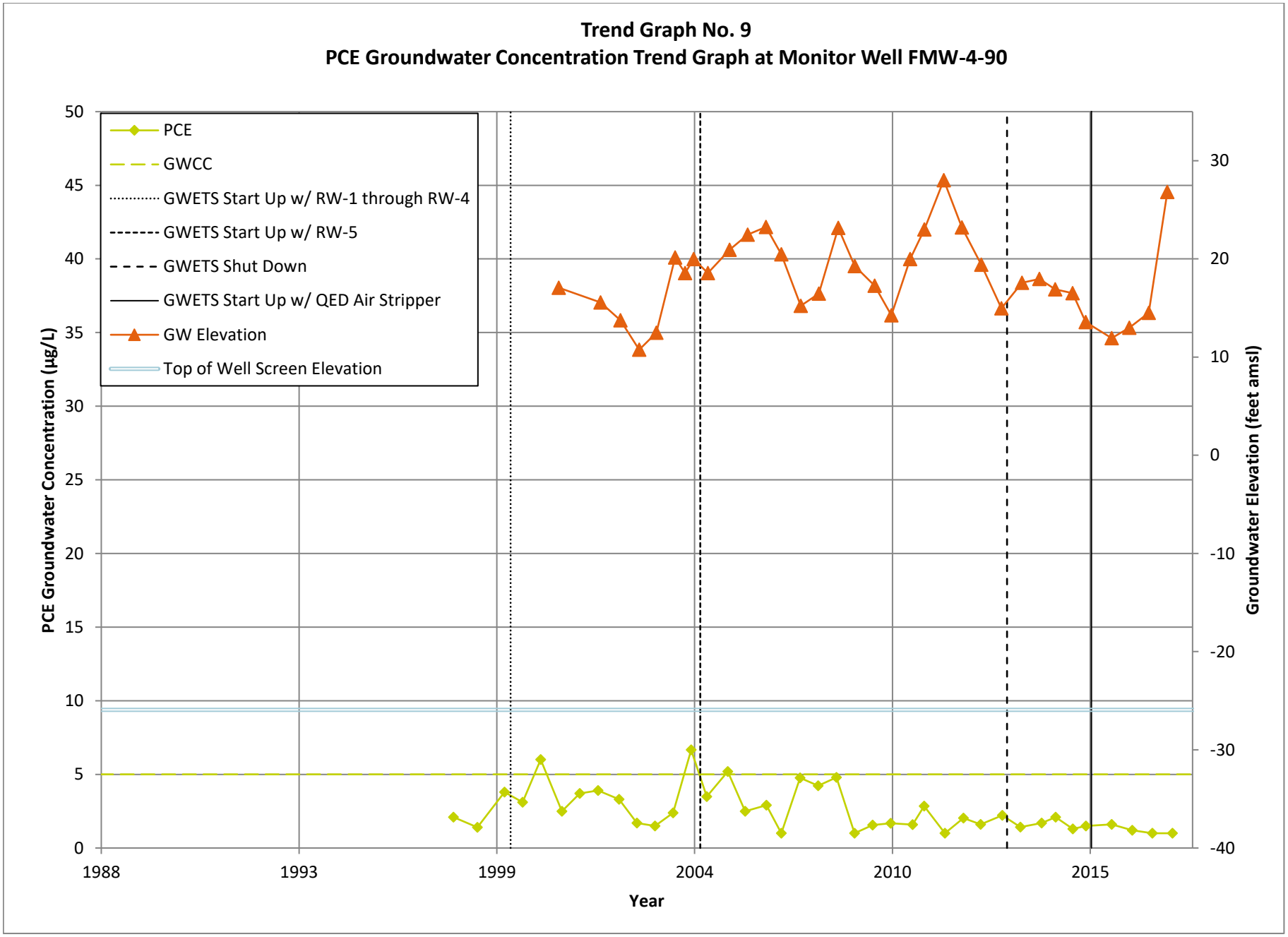

Trend Graph No. 4
PCE Groundwater Concentration Trend at Monitor Well PCMW-2
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
250
225
200
175
150
125
100
75
50
25
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015

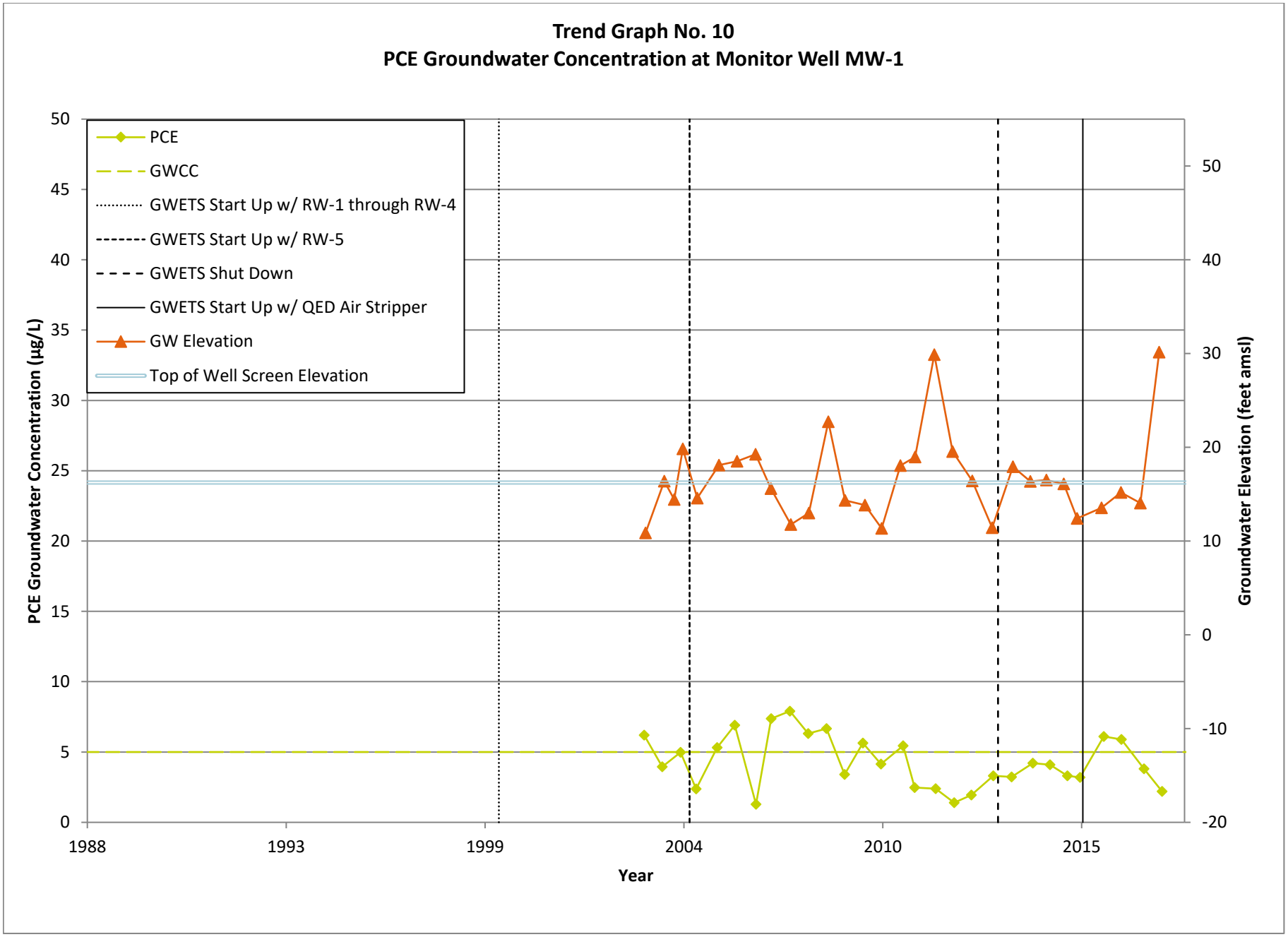

Trend Graph No. 5
PCE Groundwater Concentration Trend at Monitor Well PCMW-1
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
-10
-20
1988
1993
1999
2004
2010
2015

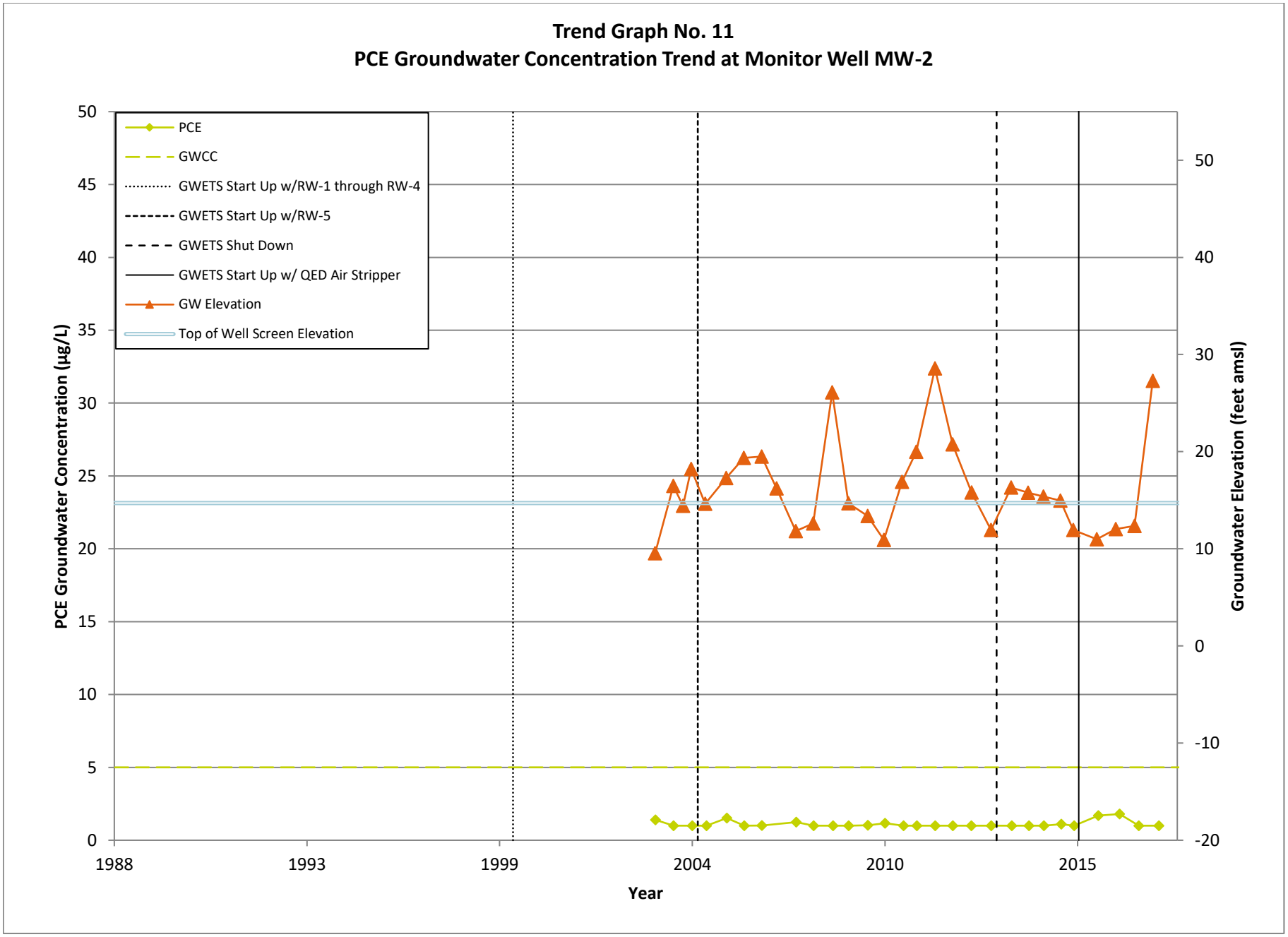

Trend Graph No. 6
PCE Groundwater Concentration Trend at Monitor Well PCMW-5
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
-10
-20
1988
1993
1999
2004
2010
2015

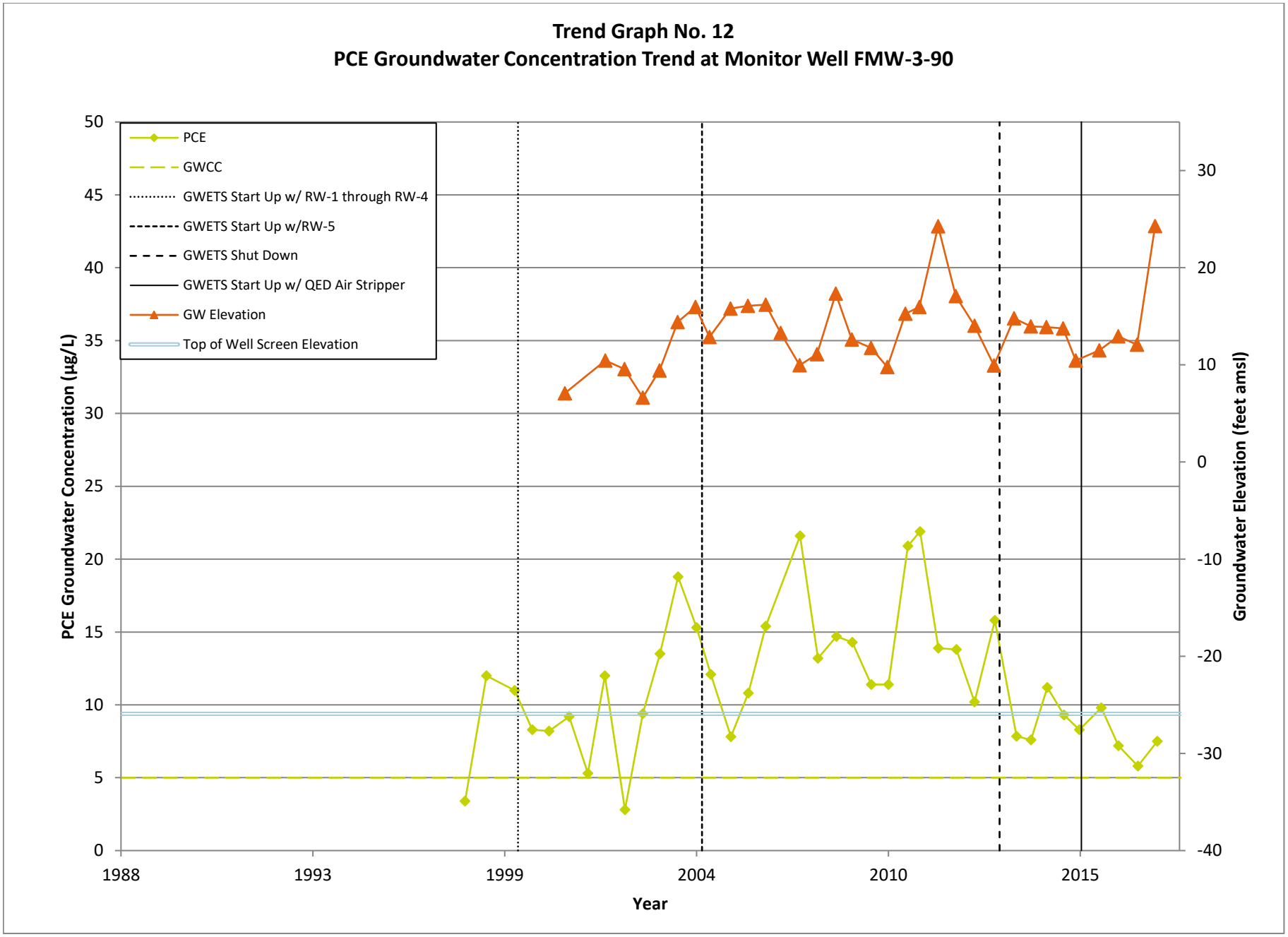

Trend Graph No. 7
PCE Groundwater Concentration Trend Graph at Monitor Well MW-5-90
PCE
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
-10
-20
1988
1993
1999
2004
2010
2015

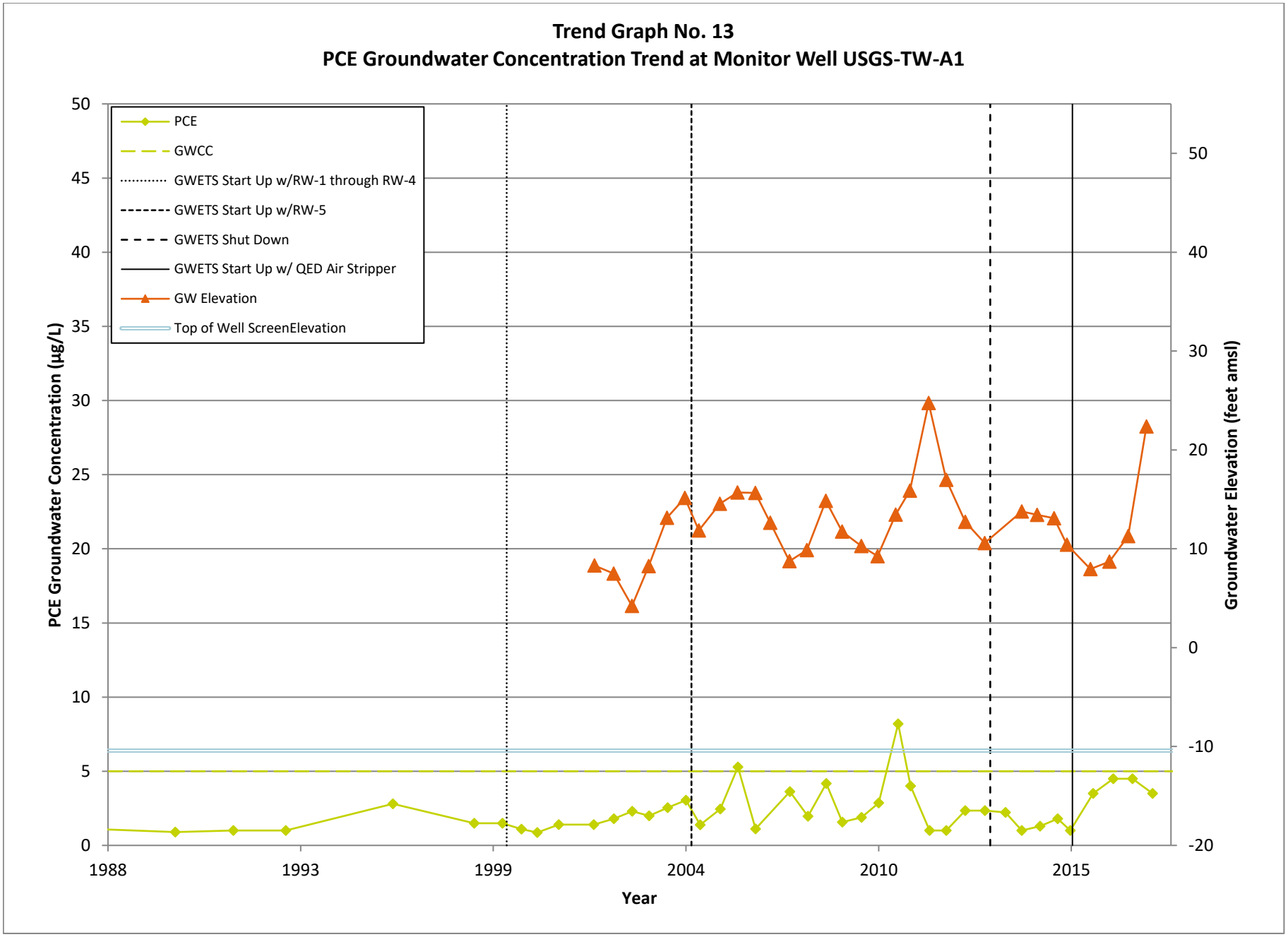

Trend Graph No. 8
PCE Groundwater Concentration Trend at Monitor Well FMW-5-90
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
0
5
10
15
20
25
30
35
40
45
50
-20
-10
0
10
20
30
40
50
1988
1993
1999
2004
2010
2015

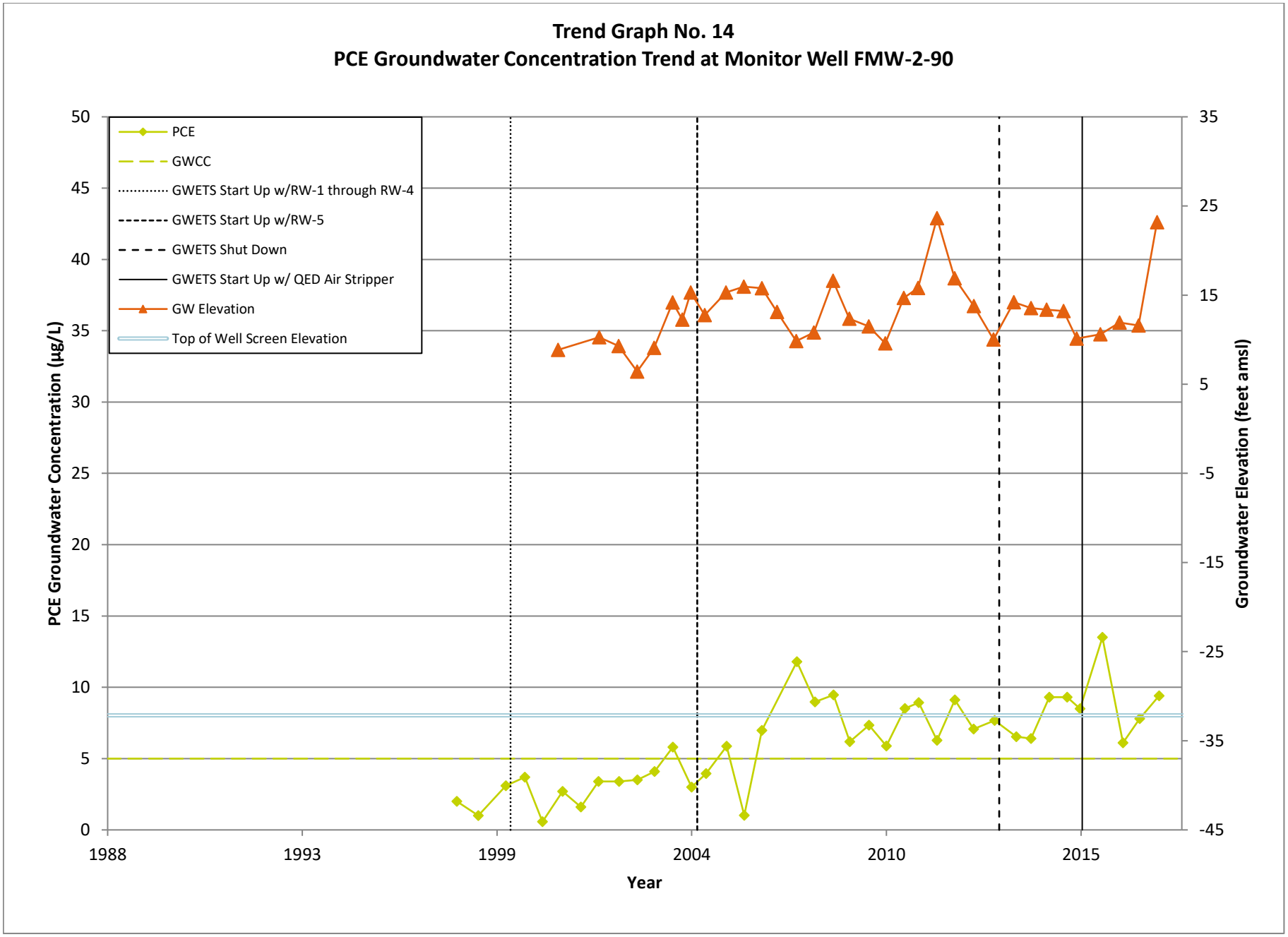

Trend Graph No. 9
PCE Groundwater Concentration Trend Graph at Monitor Well FMW-4-90
PCE
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
30
20
10
0
-10
-20
-30
-40
1988
1993
1999
2004
2010
2015

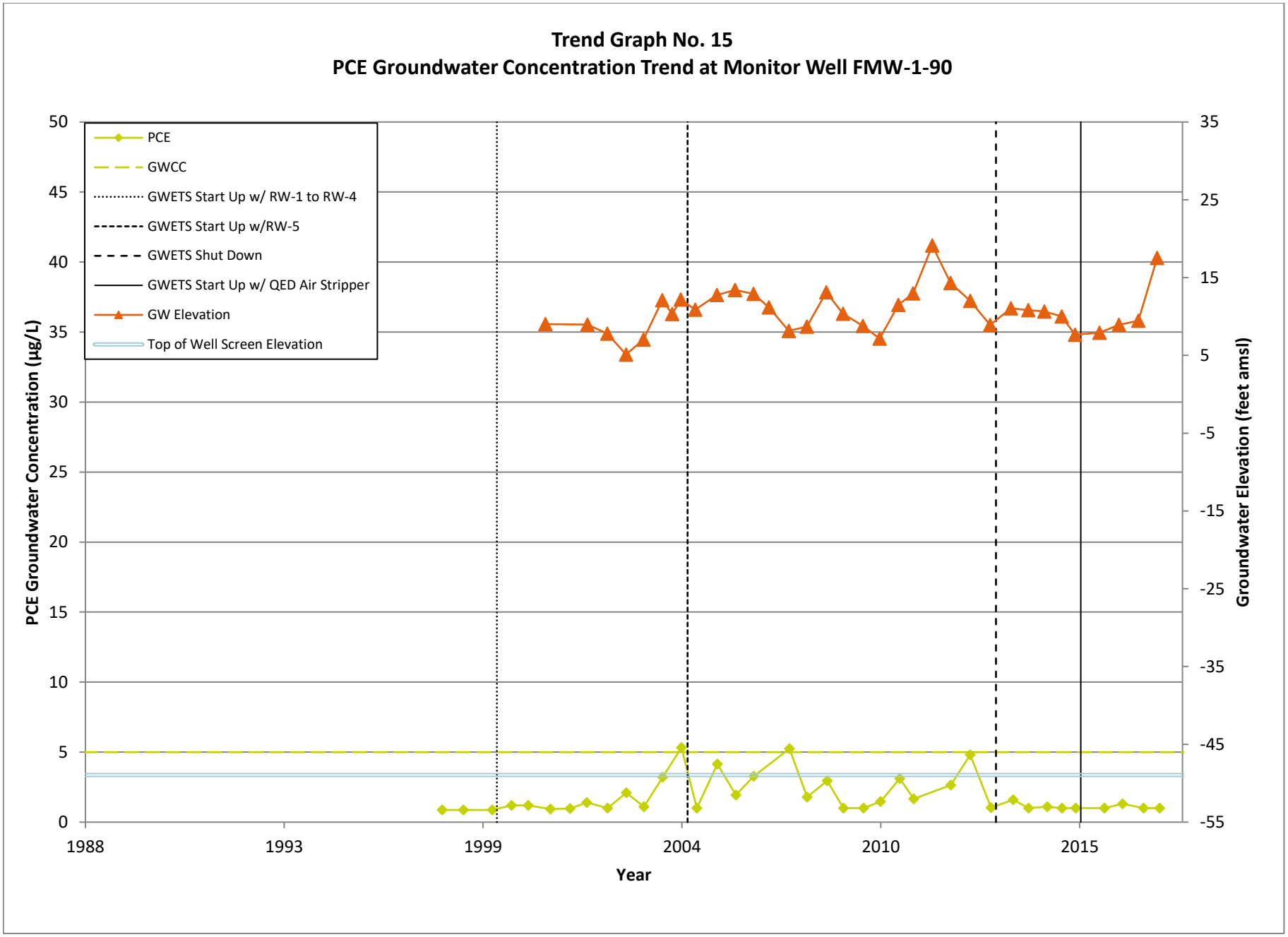

Trend Graph No. 10
PCE Groundwater Concentration at Monitor Well MW-1
PCE
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
0
5
10
15
20
25
30
35
40
45
50
-20
-10
0
10
20
30
40
50
1988
1993
1999
2004
2010
2015

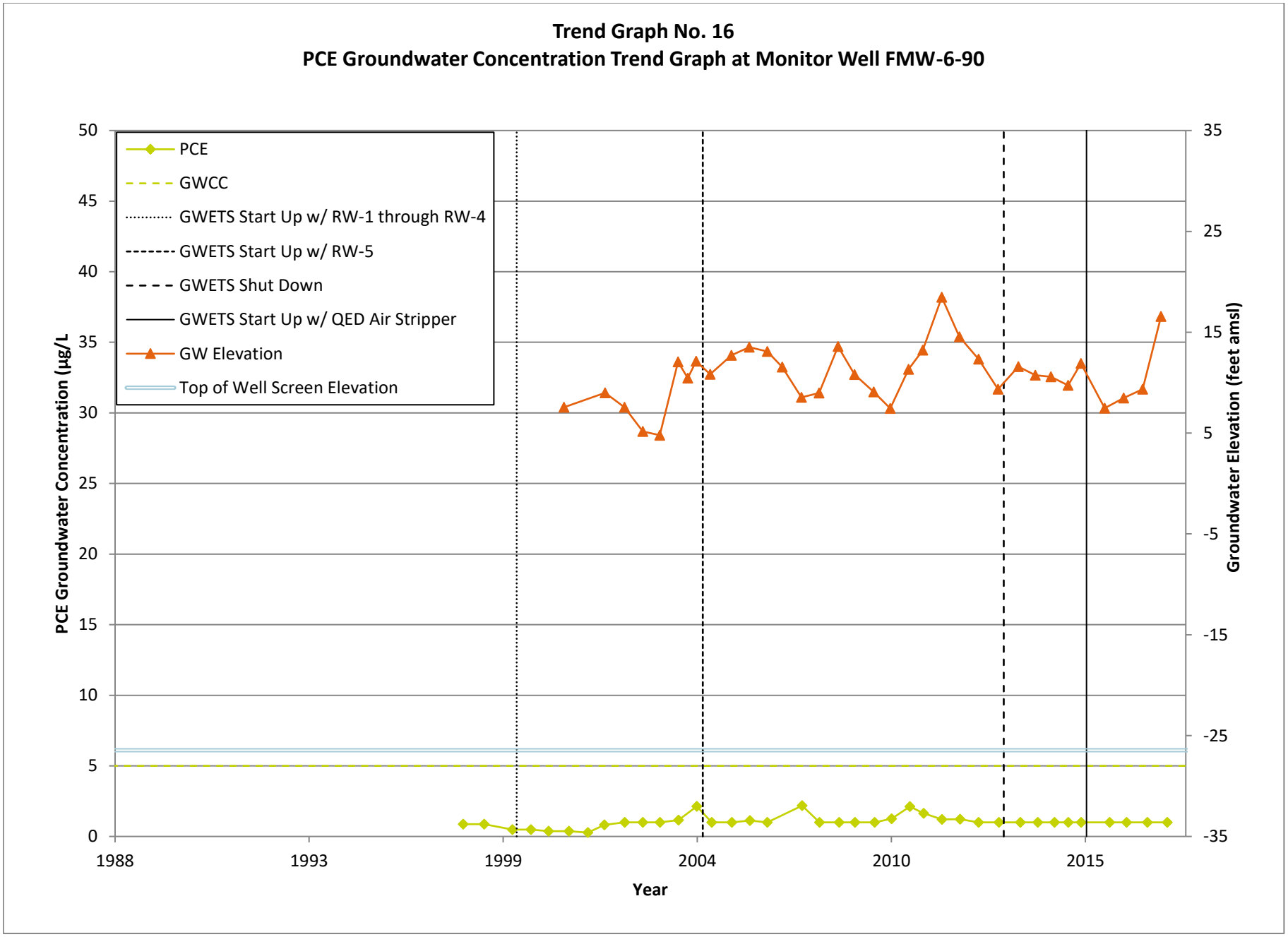

Trend Graph No. 11
PCE Groundwater Concentration Trend at Monitor Well MW-2
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
-10
-20
1988
1993
1999
2004
2010
2015

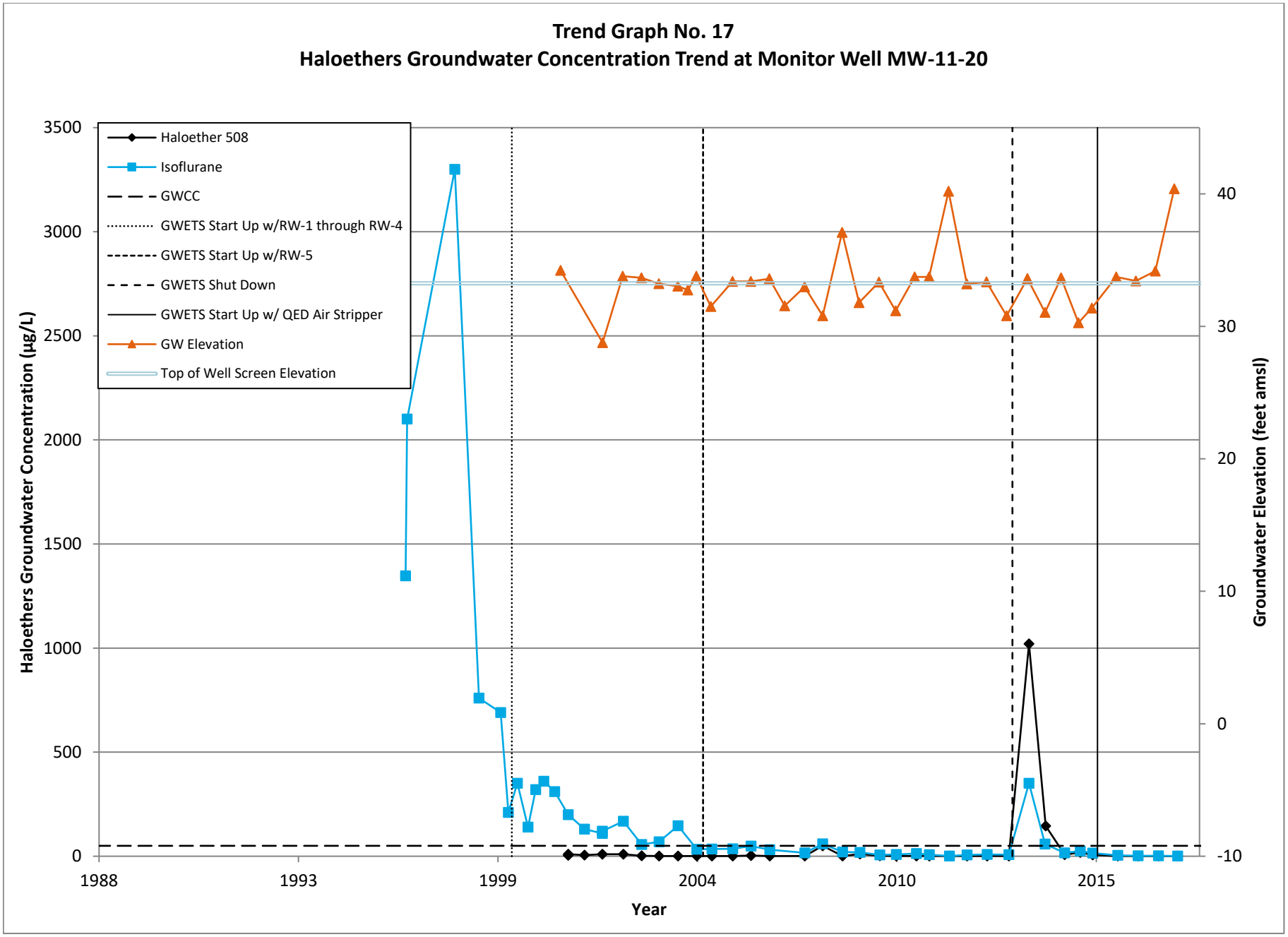

Trend Graph No. 12
PCE Groundwater Concentration Trend at Monitor Well FMW-3-90
PCE
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
0
5
10
15
20
25
30
35
40
45
50
-40
-30
-20
-10
0
10
20
30
1988
1993
1999
2004
2010
2015

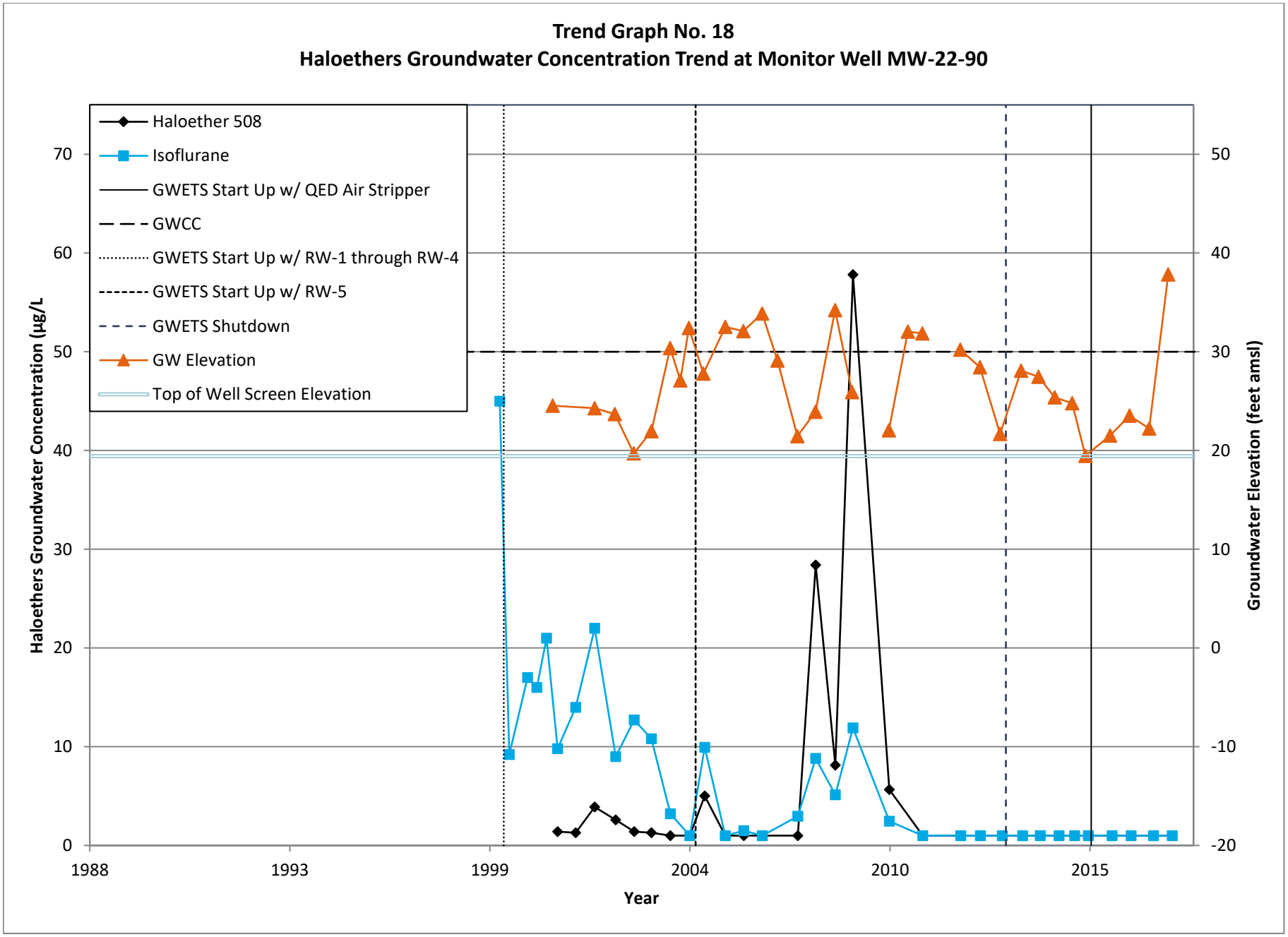

Trend Graph No. 13
PCE Groundwater Concentration Trend at Monitor Well USGS-TW-A1
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well ScreenElevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
0
5
10
15
20
25
30
35
40
45
50
-20
-10
0
10
20
30
40
50
1988
1993
1999
2004
2010
2015

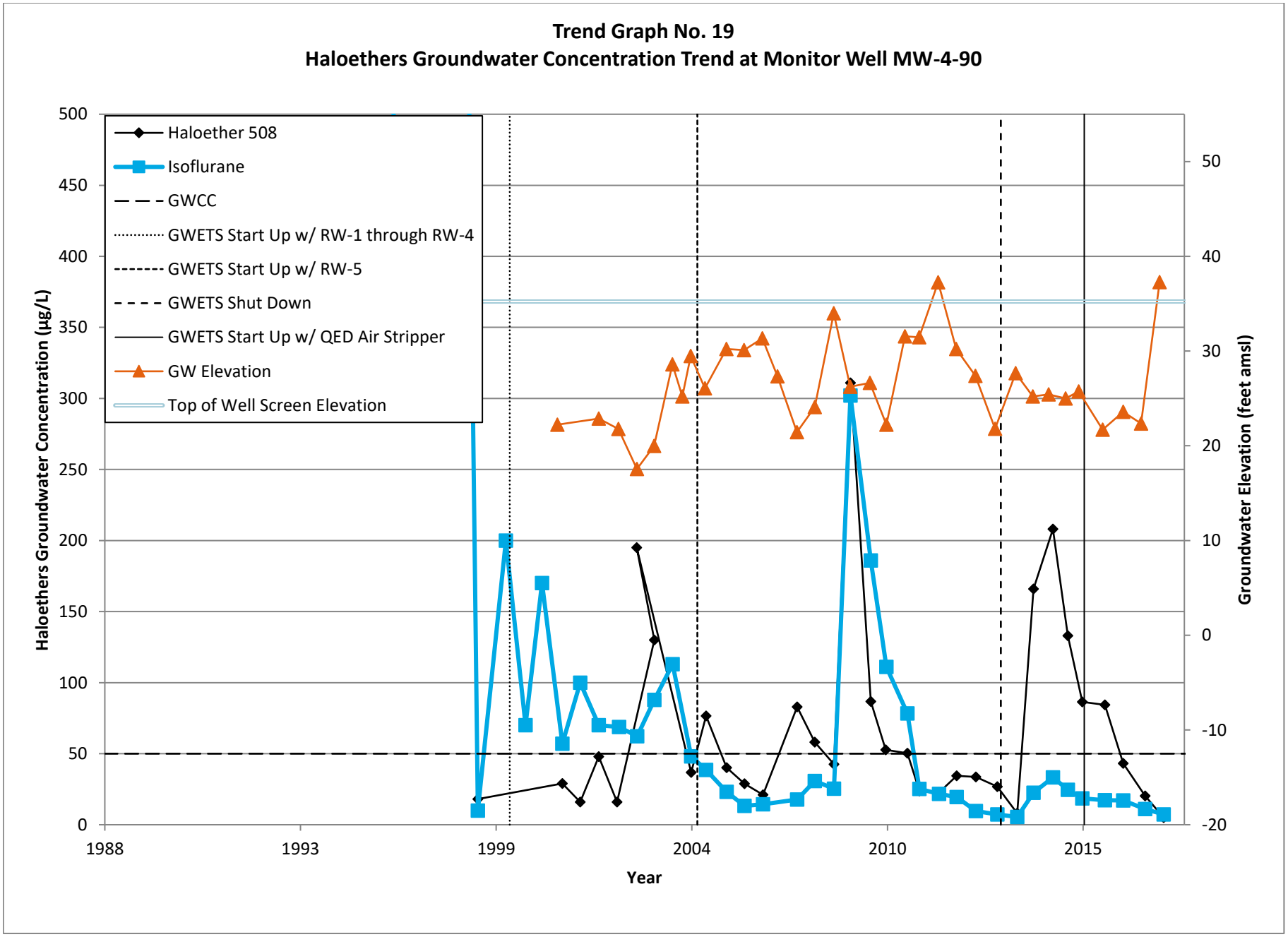

Trend Graph No. 14
PCE Groundwater Concentration Trend at Monitor Well FMW-2-90
PCE
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
35
25
15
5
-5
-15
-25
-35
-45
1988
1993
1999
2004
2010
2015

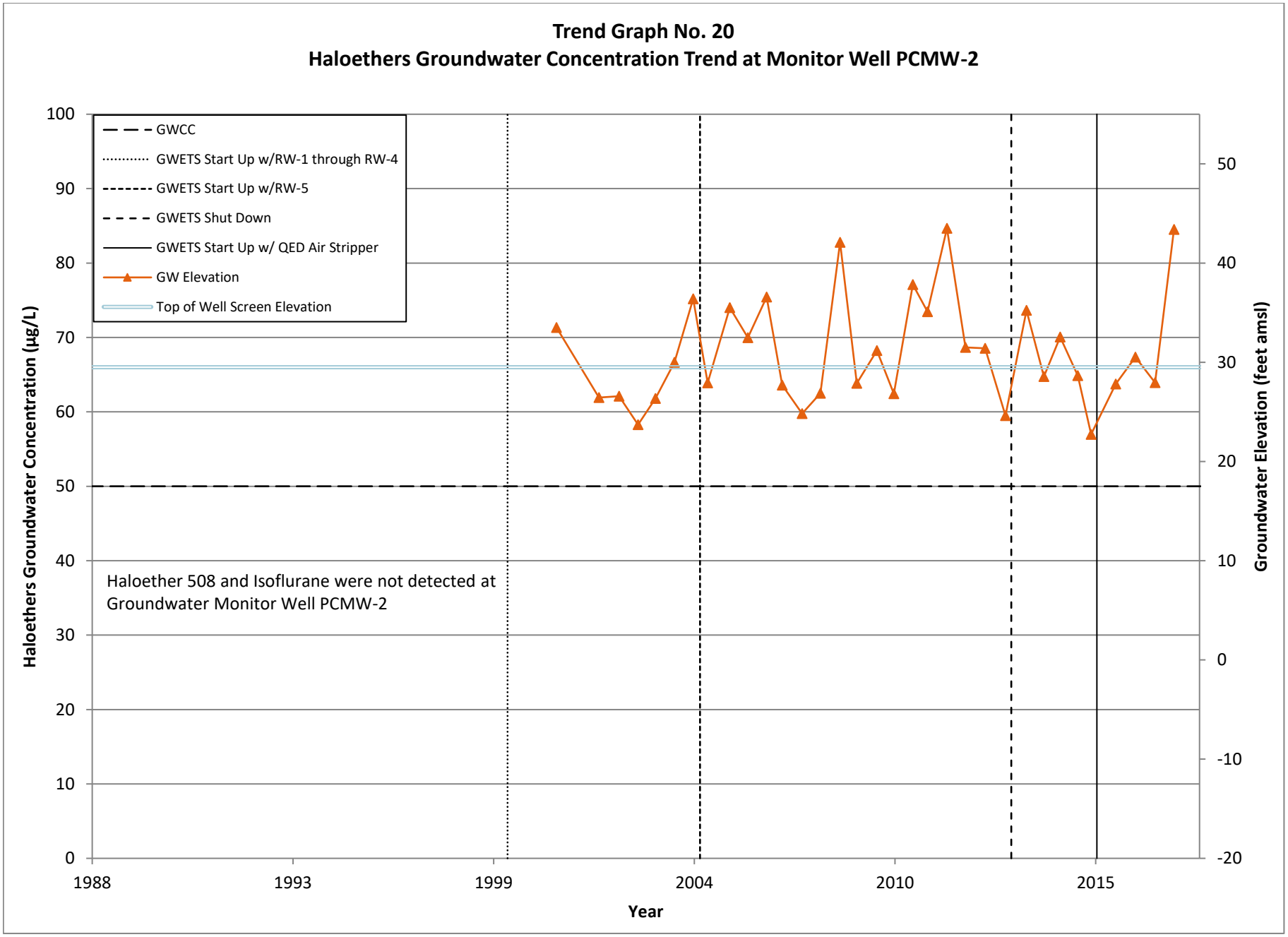

Trend Graph No. 15
PCE Groundwater Concentration Trend at Monitor Well FMW-1-90
PCE
GWCC
GWETS Start Up w/ RW-1 to RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
35
25
15
5
-5
-15
-25
-35
-45
-55
1988
1993
1999
2004
2010
2015

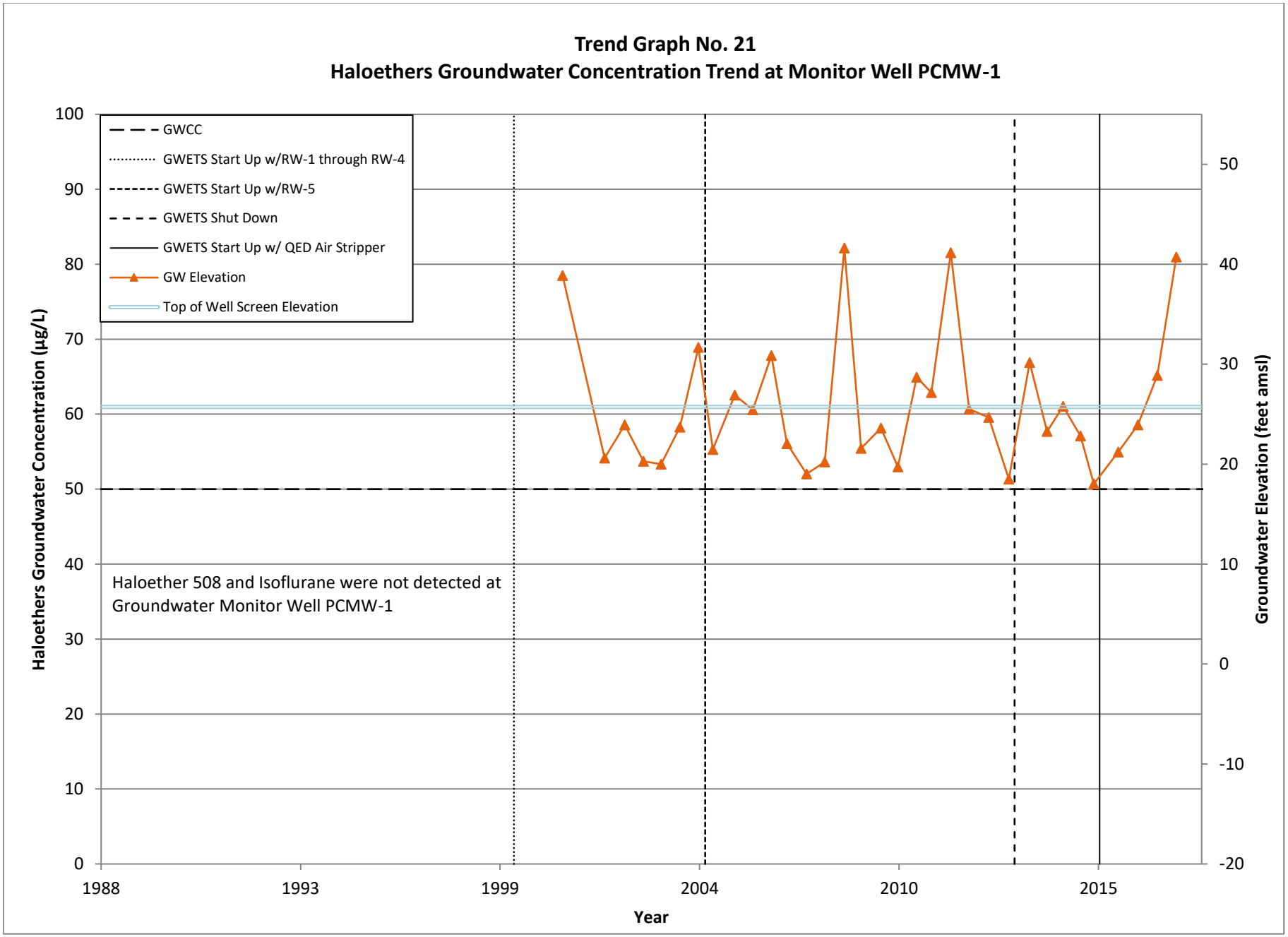

Trend Graph No. 16
PCE Groundwater Concentration Trend Graph at Monitor Well FMW-6-90
PCE
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
PCE Groundwater Concentration (µg/L
Groundwater Elevation (feet amsl)
Year
50
45
40
35
30
25
20
15
10
5
0
35
25
15
5
-5
-15
-25
-35
1988
1993
1999
2004
2010
2015

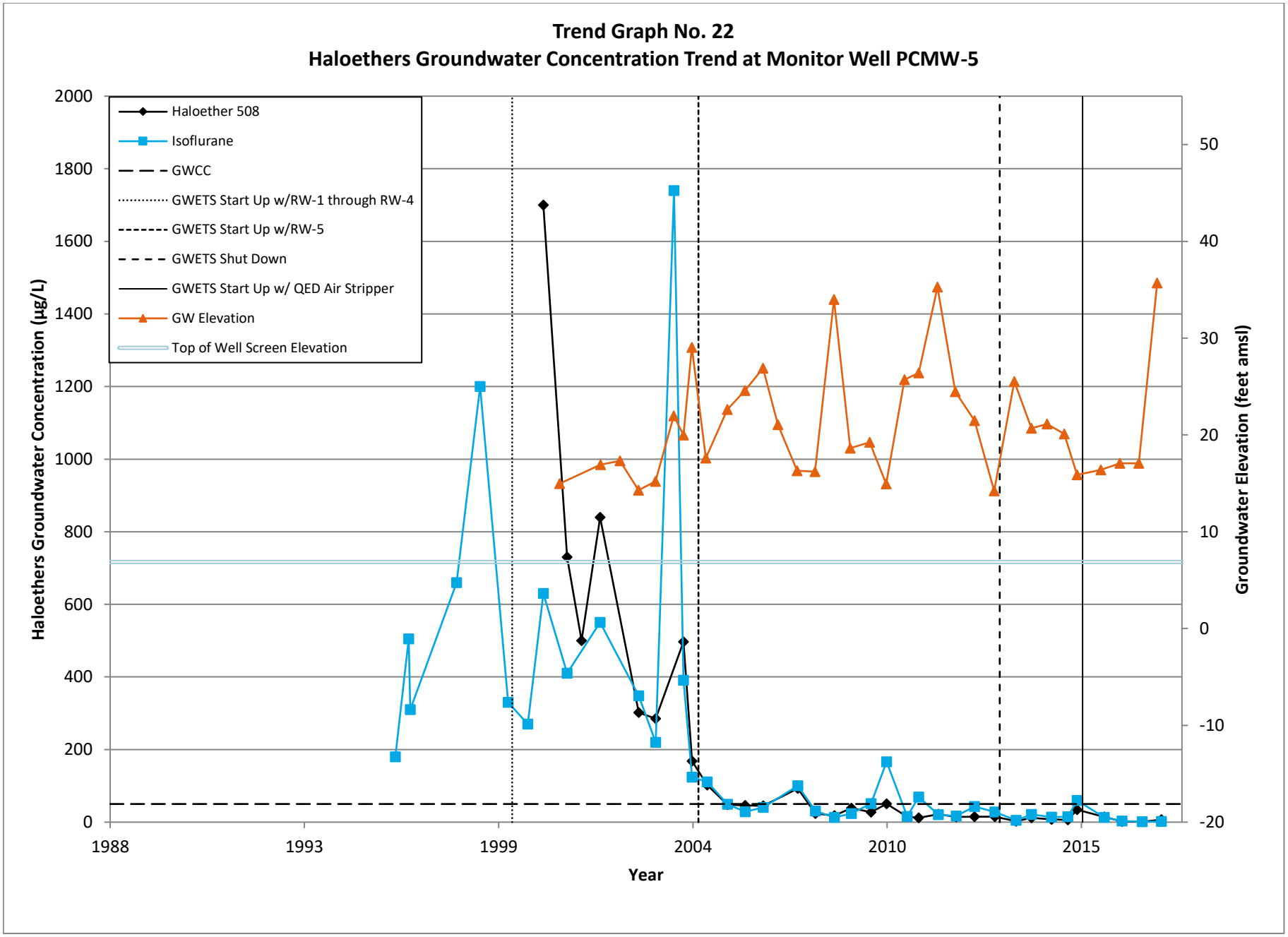

Trend Graph No. 17
Haloethers Groundwater Concentration Trend at Monitor Well MW-11-20
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
3500
3000
2500
2000
1500
1000
500
0
40
30
20
10
0
-10
1988
1993
1999
2004
2010
2015

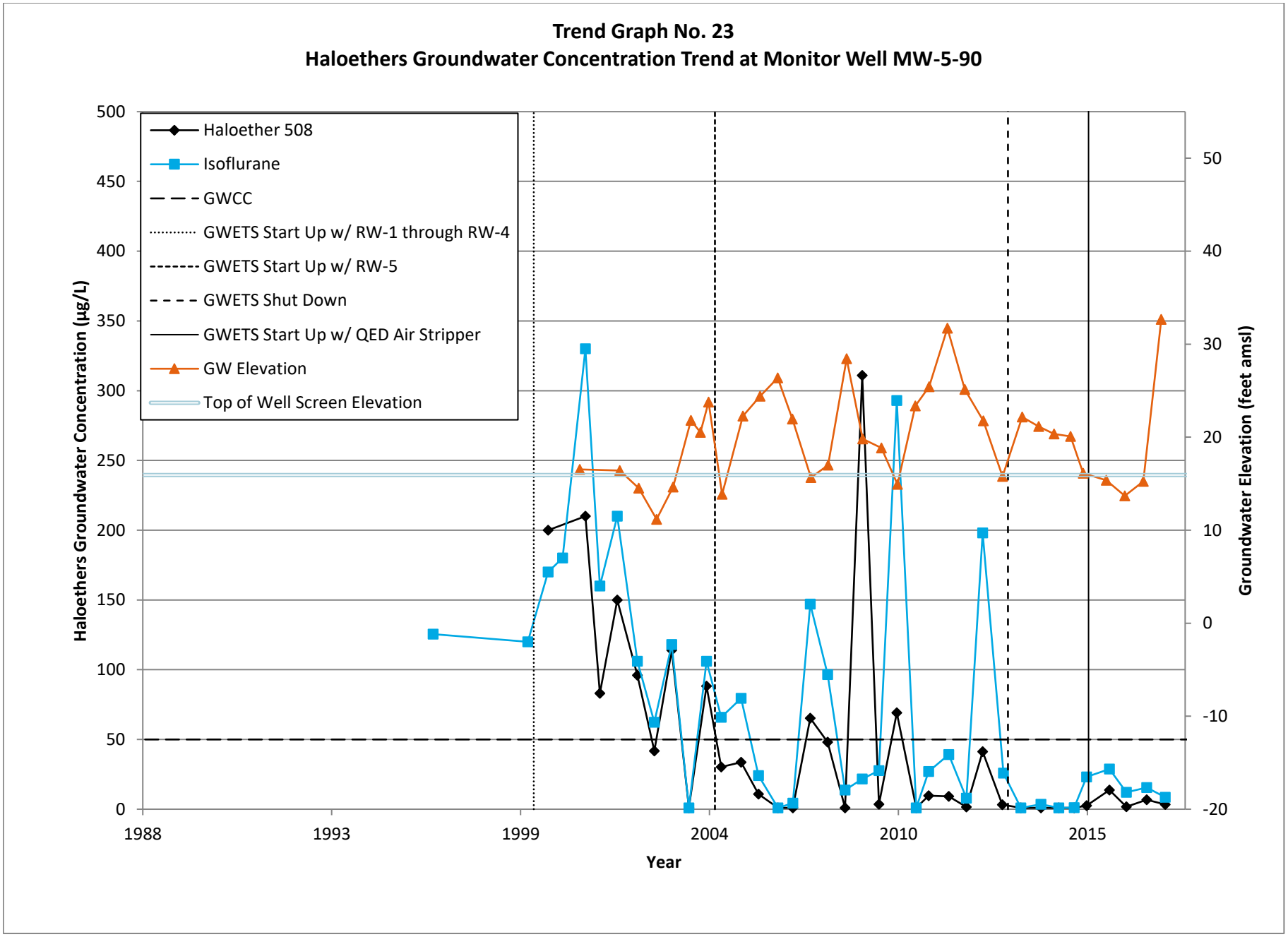

Trend Graph No. 18
Haloethers Groundwater Concentration Trend at Monitor Well MW-22-90
Haloether 508
Isoflurane
GWETS Start Up w/ QED Air Stripper
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shutdown
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L
Groundwater Elevation (feet amsl)
Year
0
10
20
30
40
50
60
70
-20
-10
0
10
20
30
40
50
1988
1993
1999
2004
2010
2015

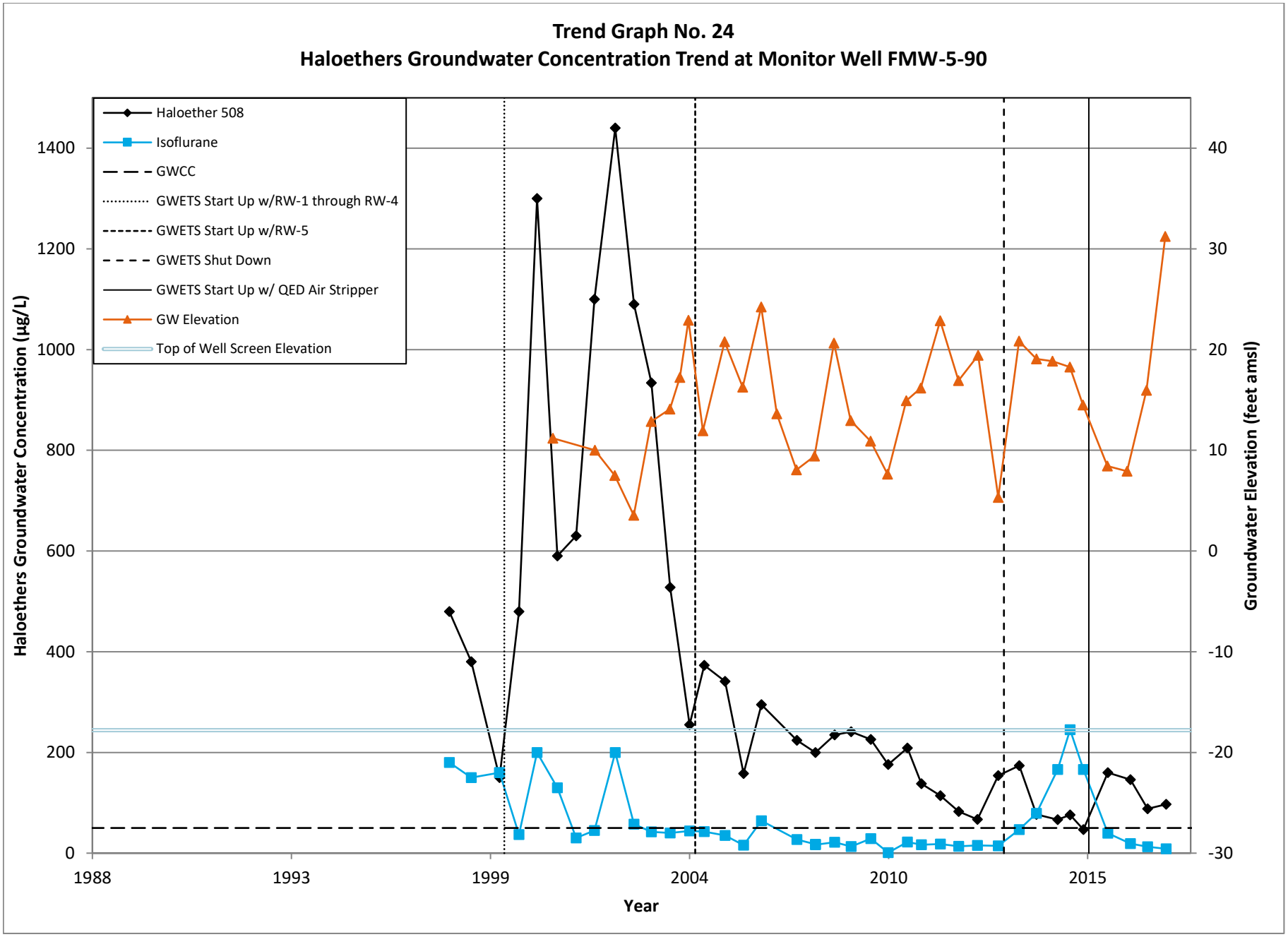

Trend Graph No. 19
Haloethers Groundwater Concentration Trend at Monitor Well MW-4-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
500
450
400
350
300
250
200
150
100
50
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015

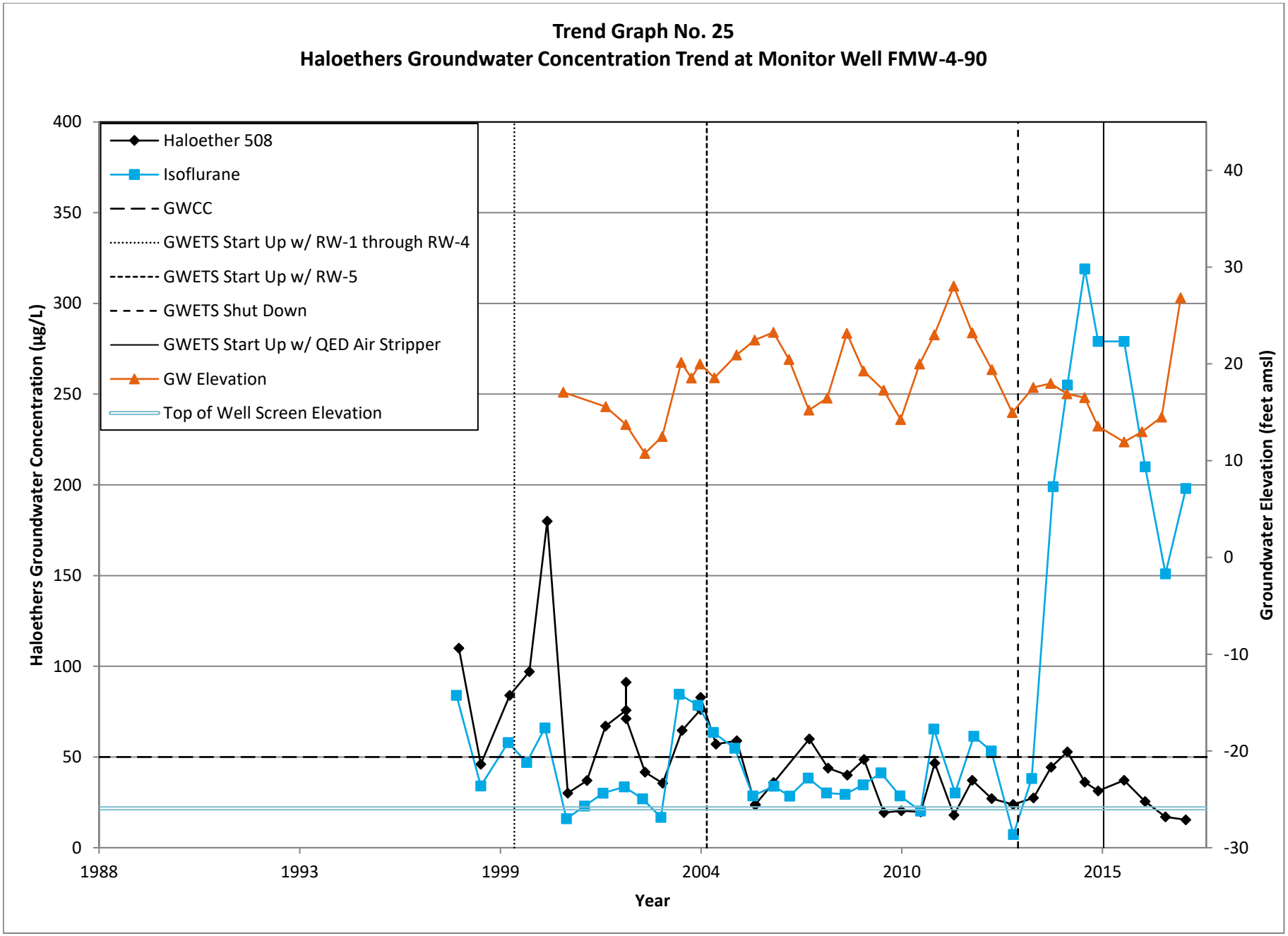

Trend Graph No. 20
Haloethers Groundwater Concentration Trend at Monitor Well PCMW-2
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloether 508 and Isoflurane were not detected at Groundwater Monitor Well PCMW-2
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
100
90
80
70
60
50
40
30
20
10
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015

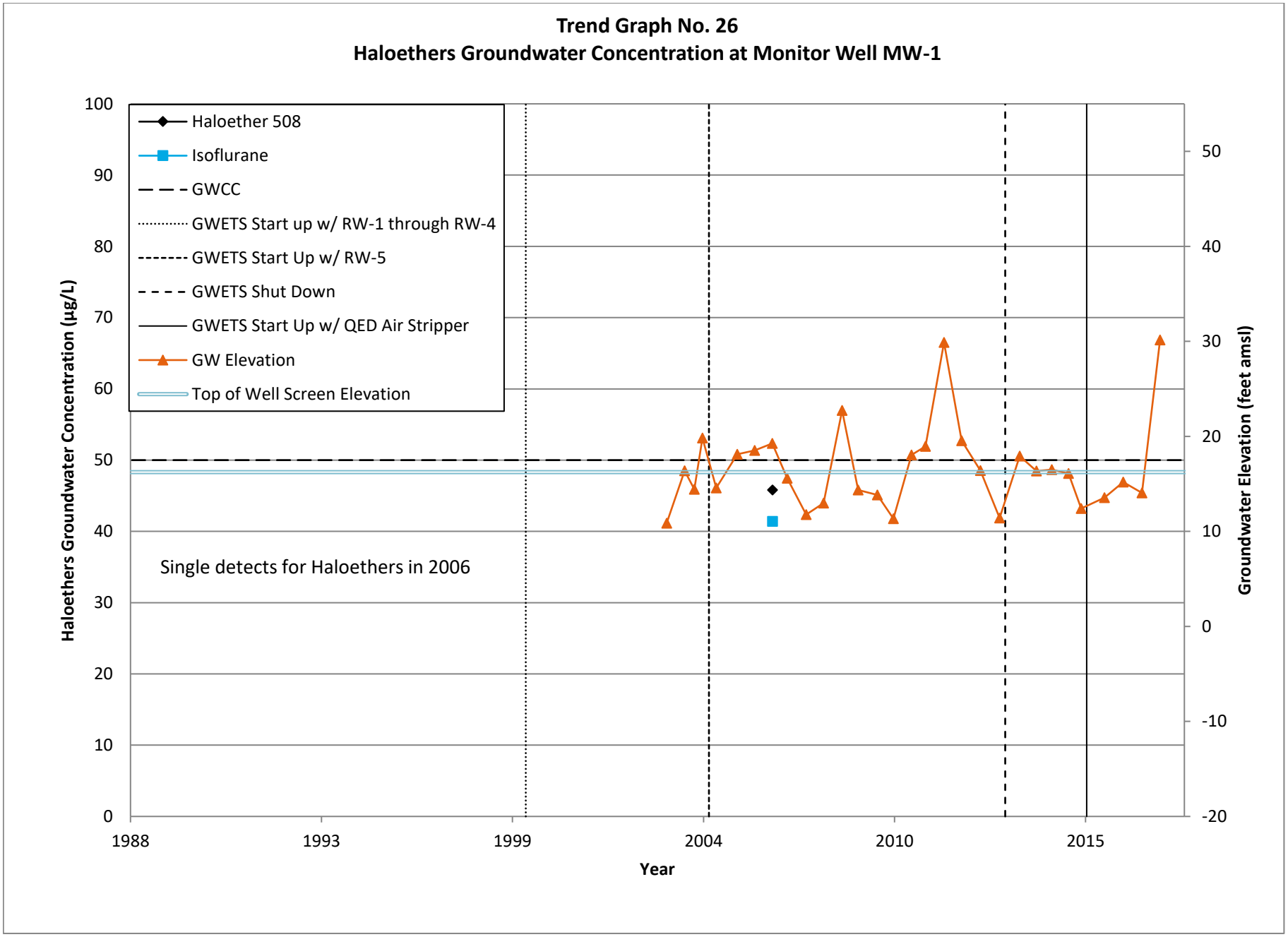

Trend Graph No. 21
Haloethers Groundwater Concentration Trend at Monitor Well PCMW-1
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloether 508 and Isoflurane were not detected at Groundwater Monitor Well PCMW-1
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
100
90
80
70
60
50
40
30
20
10
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015

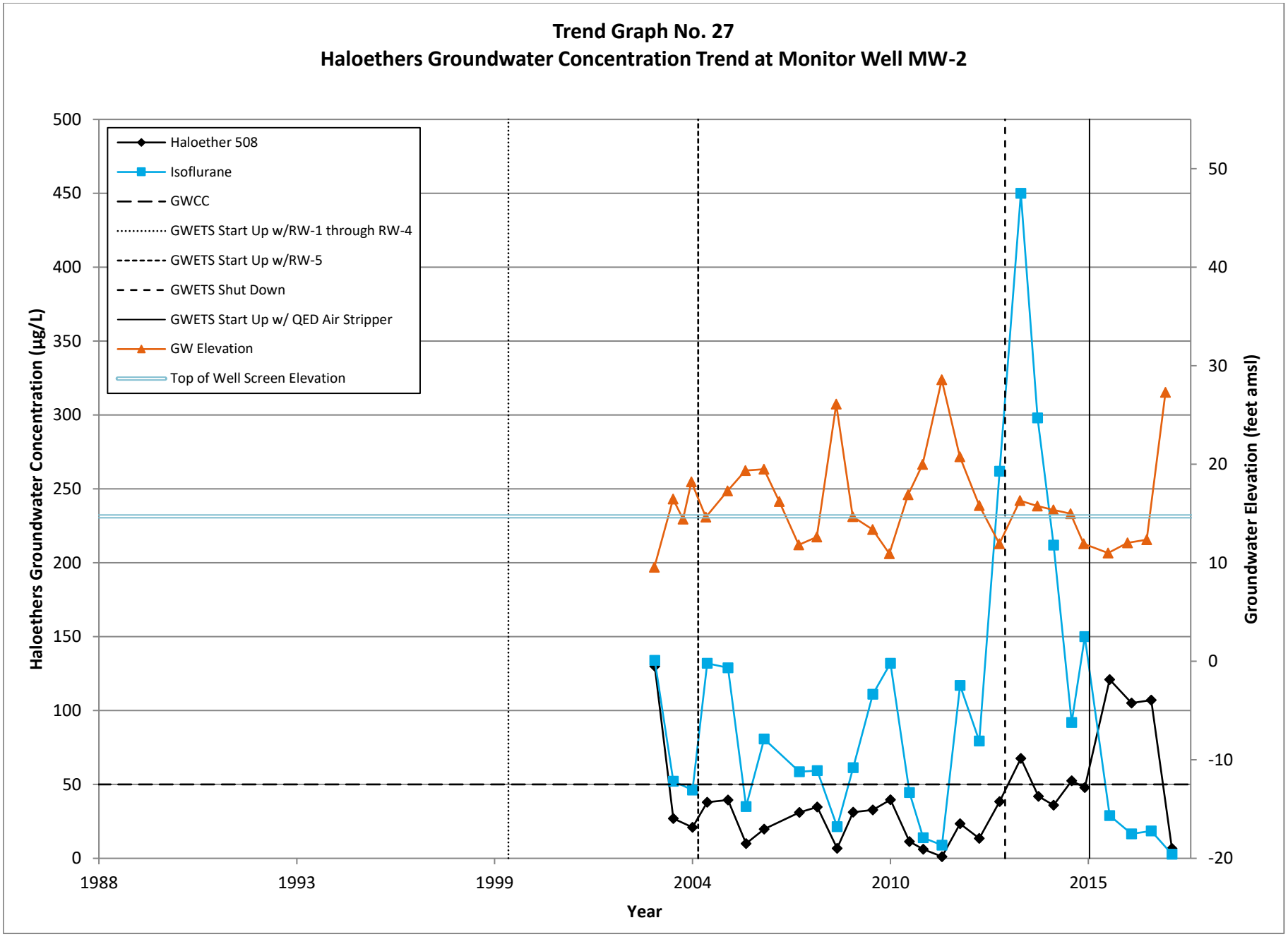

Trend Graph No. 22
Haloethers Groundwater Concentration Trend at Monitor Well PCMW-5
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
2000
1800
1600
1400
1200
1000
800
600
400
200
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015

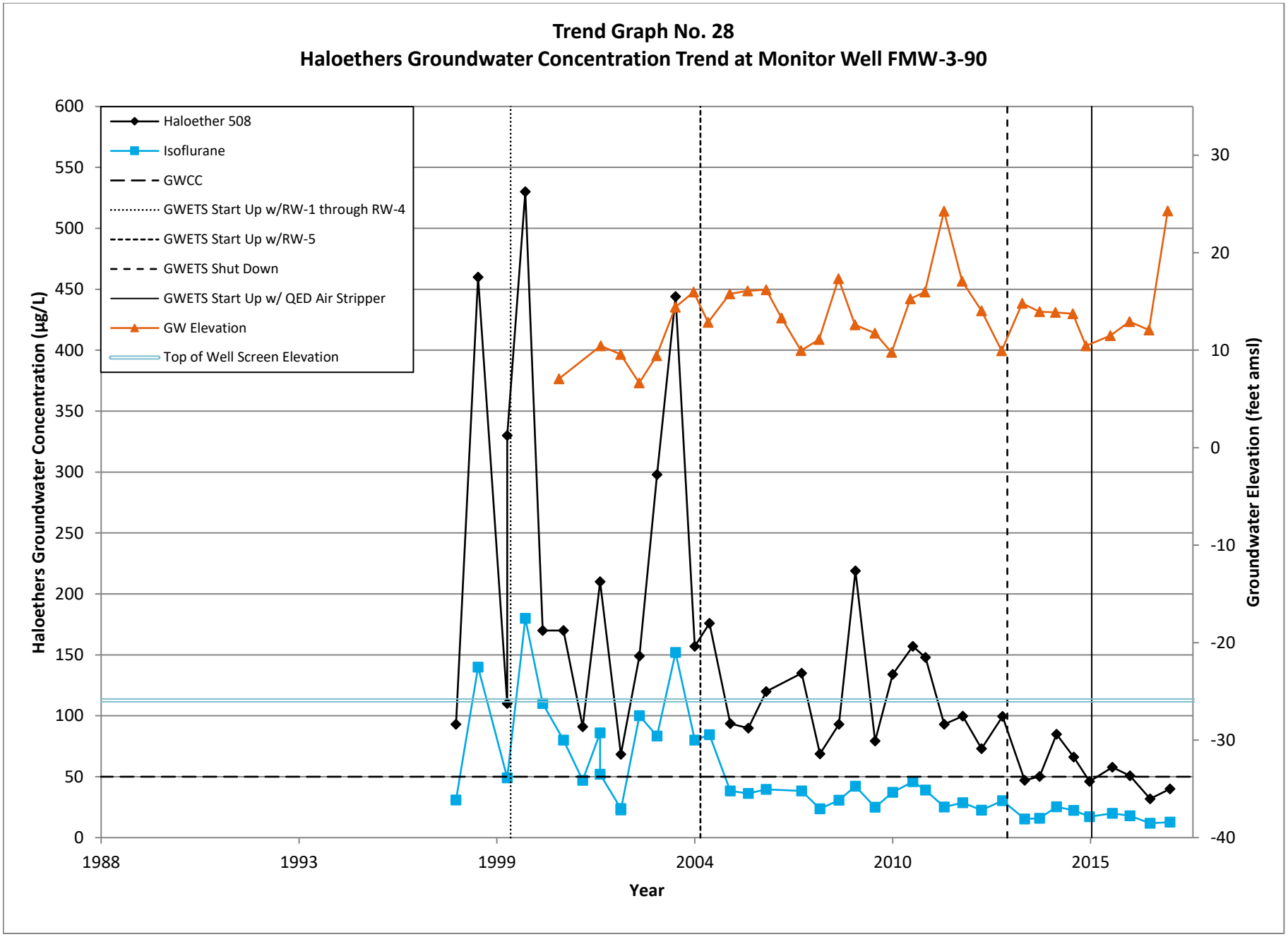

Trend Graph No. 23
Haloethers Groundwater Concentration Trend at Monitor Well MW-5-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
500
450
400
350
300
250
200
150
100
50
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015

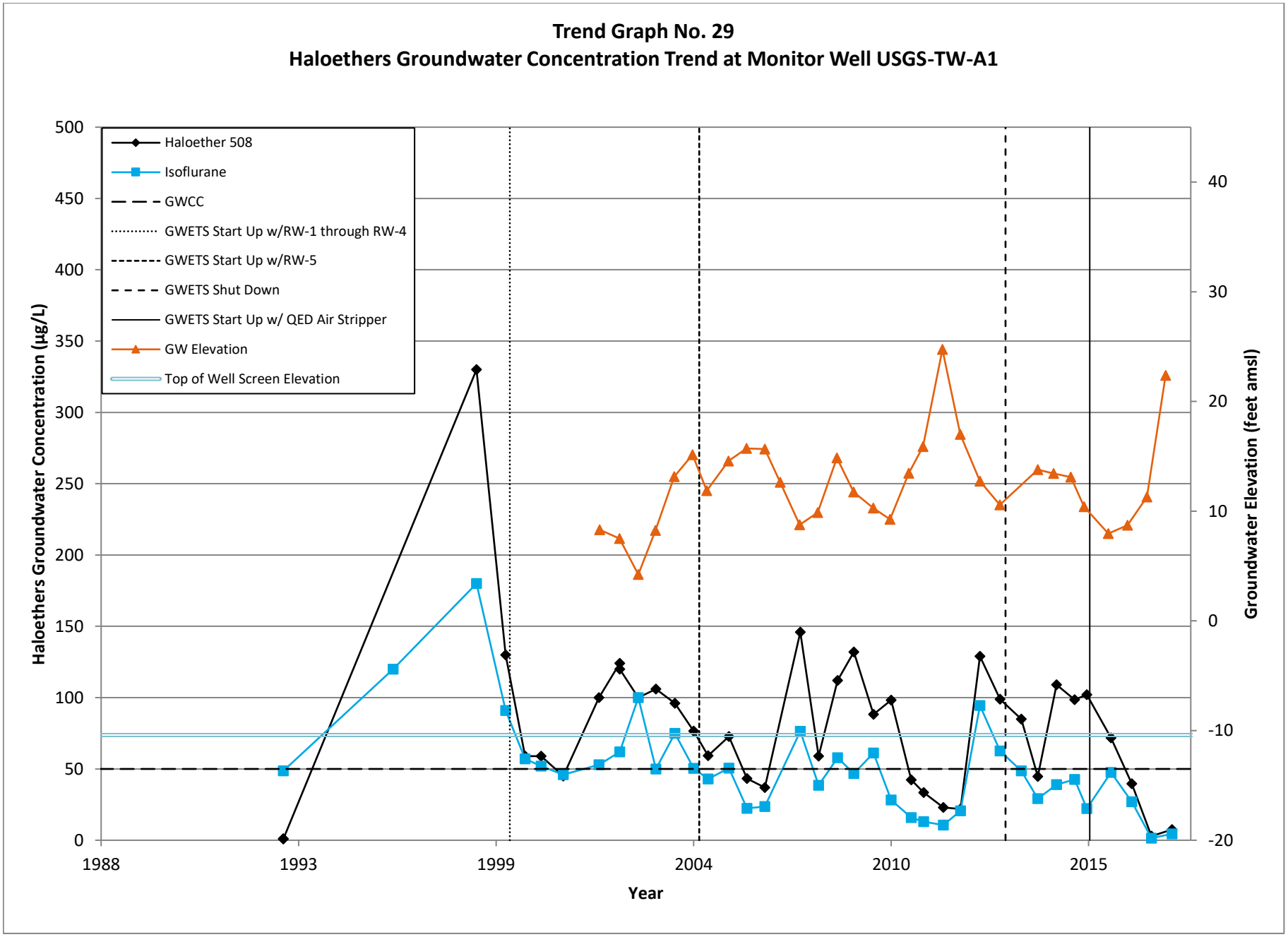

Trend Graph No. 24
Haloethers Groundwater Concentration Trend at Monitor Well FMW-5-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
0
200
400
600
800
1000
1200
1400
-30
-20
-10
0
10
20
30
40
1988
1993
1999
2004
2010
2015

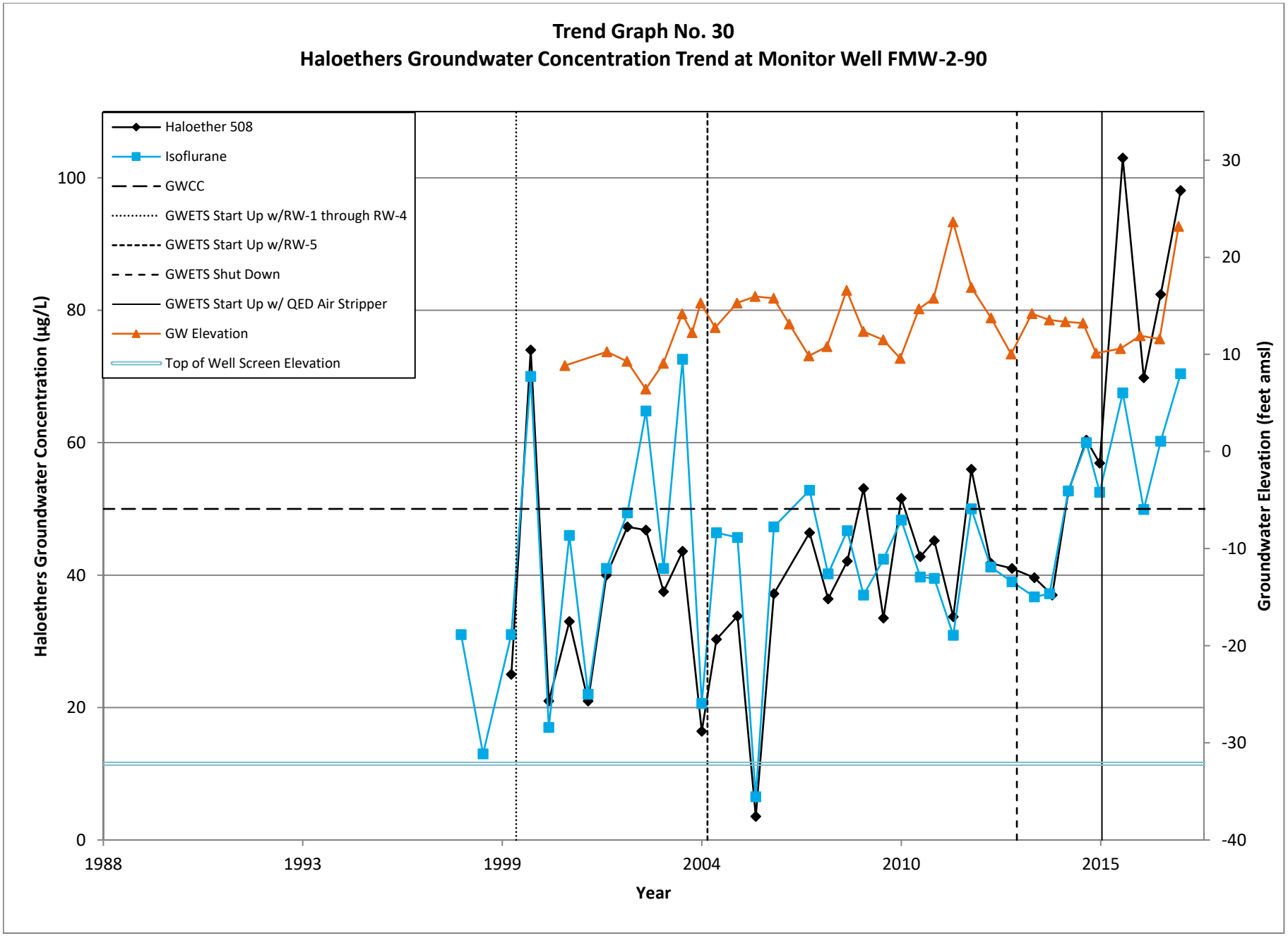

Trend Graph No. 25
Haloethers Groundwater Concentration Trend at Monitor Well FMW-4-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
400
350
300
250
200
150
100
50
0
40
30
20
10
0
-10
-20
-30
1988
1993
1999
2004
2010
2015

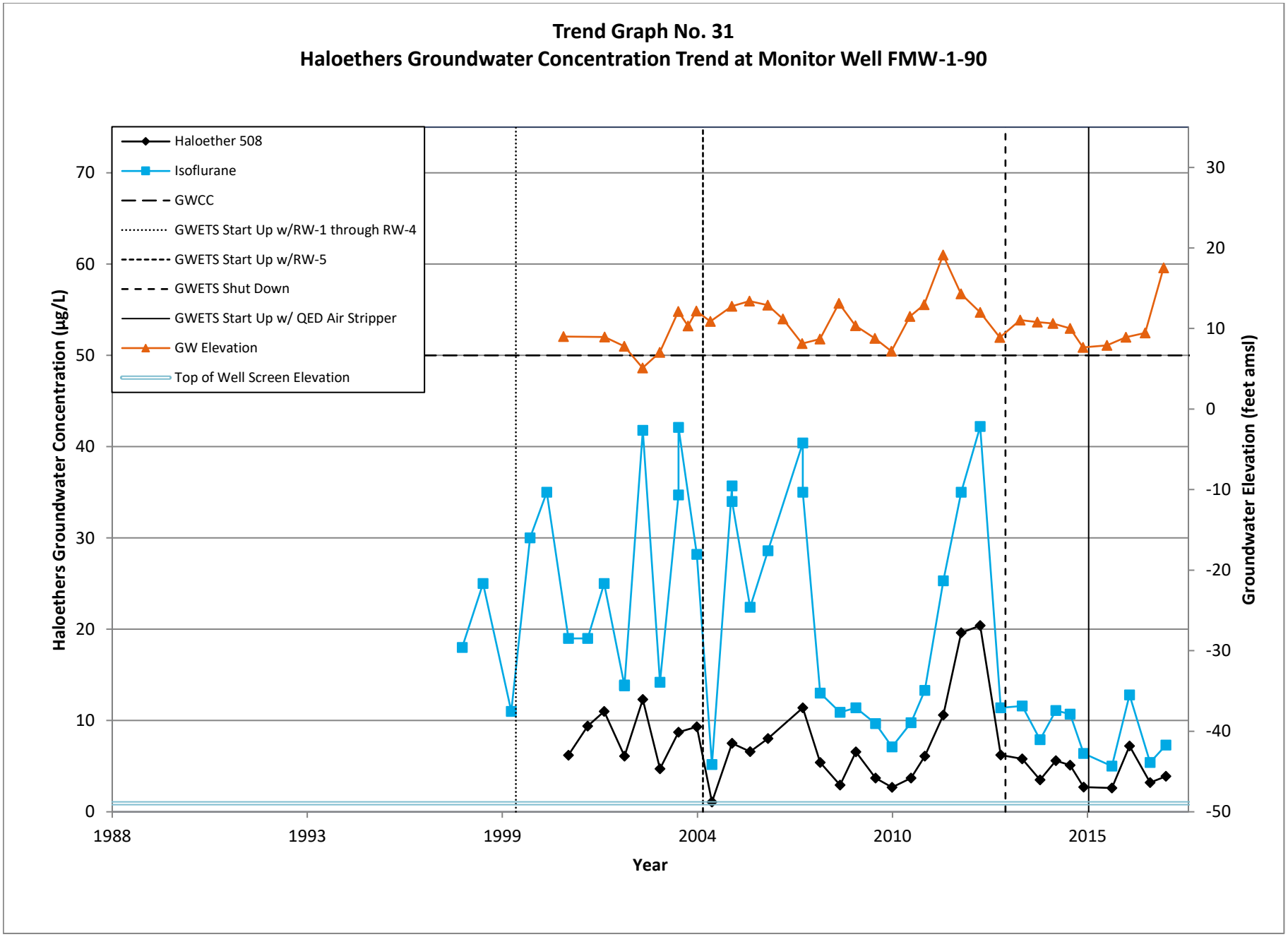

Trend Graph No. 26
Haloethers Groundwater Concentration at Monitor Well MW-1
Haloether 508
Isoflurane
GWCC
GWETS Start up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Single detects for Haloethers in 2006
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
100
90
80
70
60
50
40
30
20
10
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015

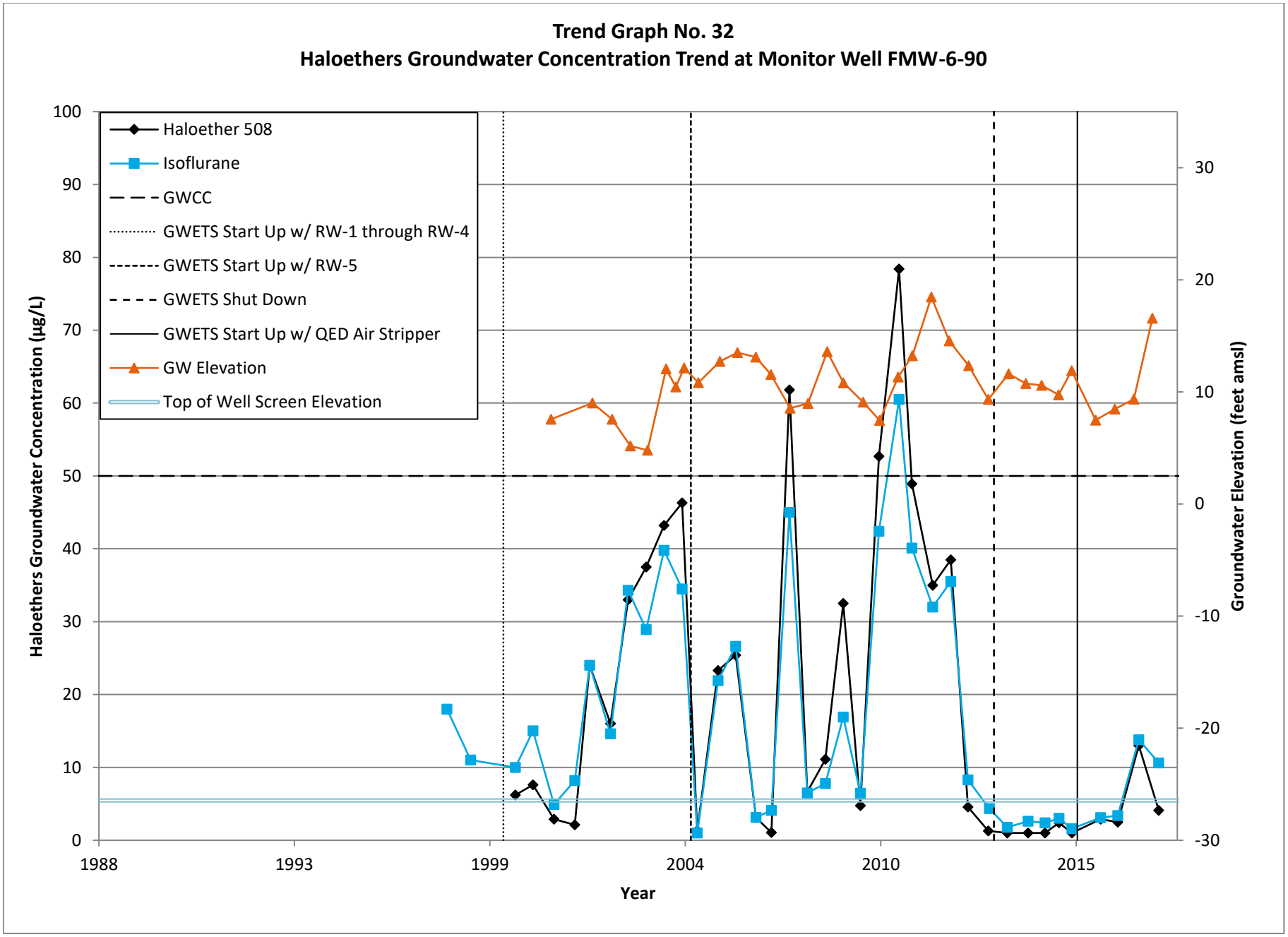

Trend Graph No. 27
Haloethers Groundwater Concentration Trend at Monitor Well MW-2
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
500
450
400
350
300
250
200
150
100
50
0
50
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015


Trend Graph No. 28
Haloethers Groundwater Concentration Trend at Monitor Well FMW-3-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
600
550
500
450
400
350
300
250
200
150
100
50
0
30
20
10
0
-10
-20
-30
-40
1988
1993
1999
2004
2010
2015


Trend Graph No. 29
Haloethers Groundwater Concentration Trend at Monitor Well USGS-TW-A1
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
500
450
400
350
300
250
200
150
100
50
0
40
30
20
10
0
-10
-20
1988
1993
1999
2004
2010
2015


Trend Graph No. 30
Haloethers Groundwater Concentration Trend at Monitor Well FMW-2-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
0
20
40
60
80
100
-40
-30
-20
-10
0
10
20
30
1988
1993
1999
2004
2010
2015


Trend Graph No. 31
Haloethers Groundwater Concentration Trend at Monitor Well FMW-1-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/RW-1 through RW-4
GWETS Start Up w/RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
0
10
20
30
40
50
60
70
-50
-40
-30
-20
-10
0
10
20
30
1988
1993
1999
2004
2010
2015


Trend Graph No. 32
Haloethers Groundwater Concentration Trend at Monitor Well FMW-6-90
Haloether 508
Isoflurane
GWCC
GWETS Start Up w/ RW-1 through RW-4
GWETS Start Up w/ RW-5
GWETS Shut Down
GWETS Start Up w/ QED Air Stripper
GW Elevation
Top of Well Screen Elevation
Haloethers Groundwater Concentration (µg/L)
Groundwater Elevation (feet amsl)
Year
100
90
80
70
60
50
40
30
20
10
0
30
20
10
0
-10
-20
-30
1988
1993
1999
2004
2010
2015

APPENDIX E

Data Validation Reports (on CD)

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2065329
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29167R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2065329 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171107	2065329001	Water	11/07/2017		X				
EB-20171108	2065329002	Water	11/08/2017		X				
FB-20171108	2065329003	Water	11/08/2017		X				
FMW-5-90-BP	2065329004	Water	11/08/2017		X				
EB-20171109	2065329005	Water	11/09/2017		X				
FB-20171109	2065329006	Water	11/09/2017		X				
MW-1C-1BR-A-BP	2065329007	Water	11/09/2017		X				
EB-20171110	2065329008	Water	11/10/2017		X				
FB-20171110	2065329009	Water	11/10/2017		X				
MW-4B-1BR-BP	2065329010	Water	11/10/2017		X				
MW-4B-3-BP	2065329011	Water	11/10/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-4B-3-BP for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, no qualification of the sample results was required.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-4B-3-BP	Haloether 427	>UL	AC
	Haloether 406	>UL	>UL
	1,1,2-Trichlorotrifluoroethane		

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location within this SDG.

7. System Performance and Overall Assessment

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-4B-3-BP	Haloether 508	-	145 D	145 D
	Total Haloether	-	229 D	229 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: January 25, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: TB-20171107 **Lab ID: 2065329001** Collected: 11/07/17 00:00 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 11:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 11:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 11:49	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 11:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 11:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 11:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 11:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 11:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 11:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 11:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 11:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 11:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 11:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 11:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 11:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 11:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 11:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 11:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 11:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 11:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 11:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 406	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 421	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 427	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 428	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 508	ND	ug/L	1.0	1		11/17/17 11:49		
Haloether 528	ND	ug/L	1.0	1		11/17/17 11:49		
Halomar	ND	ug/L	1.0	1		11/17/17 11:49		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 11:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 11:49		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 11:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 11:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 11:49	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 11:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 11:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 11:49	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 11:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 11:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 11:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 11:49	79-01-6	

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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: TB-20171107 **Lab ID: 2065329001** Collected: 11/07/17 00:00 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 11:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 11:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 11:49	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 11:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 11:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 11:49	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 11:49	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 11:49	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		11/17/17 11:49	1868-53-7	

Sample: EB-20171108 **Lab ID: 2065329002** Collected: 11/08/17 09:09 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 12:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 12:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 12:07	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 12:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 12:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 12:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 12:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 12:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 12:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 12:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 12:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 12:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 12:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 12:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 12:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 12:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 12:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 12:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 12:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 406	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 421	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 427	ND	ug/L	1.0	1		11/17/17 12:07		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: EB-20171108 **Lab ID: 2065329002** Collected: 11/08/17 09:09 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 508	ND	ug/L	1.0	1		11/17/17 12:07		
Haloether 528	ND	ug/L	1.0	1		11/17/17 12:07		
Halomar	ND	ug/L	1.0	1		11/17/17 12:07		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 12:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 12:07		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 12:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 12:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 12:07	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 12:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 12:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 12:07	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 12:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 12:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 12:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 12:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 12:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 12:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 12:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 12:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 12:07	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 12:07	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/17/17 12:07	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		11/17/17 12:07	1868-53-7	

Sample: FB-20171108 **Lab ID: 2065329003** Collected: 11/08/17 10:17 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 12:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 12:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 12:25	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 12:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 12:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 12:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 12:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 12:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 12:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 12:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 12:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 12:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 12:25	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FB-20171108 **Lab ID: 2065329003** Collected: 11/08/17 10:17 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/17/17 12:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 12:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 12:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 12:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 12:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 12:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 406	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 421	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 427	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 428	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 508	ND	ug/L	1.0	1		11/17/17 12:25		
Haloether 528	ND	ug/L	1.0	1		11/17/17 12:25		
Halomar	ND	ug/L	1.0	1		11/17/17 12:25		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 12:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 12:25		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 12:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 12:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 12:25	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 12:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 12:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 12:25	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 12:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 12:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 12:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 12:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 12:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 12:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 12:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 12:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 12:25	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 12:25	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 12:25	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		11/17/17 12:25	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FMW-5-90-BP **Lab ID: 2065329004** Collected: 11/08/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/18/17 12:52	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/18/17 12:52	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/18/17 12:52	107-13-1	
Benzene	ND	ug/L	1.0	1		11/18/17 12:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/18/17 12:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/18/17 12:52	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/18/17 12:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/18/17 12:52	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/18/17 12:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/18/17 12:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/18/17 12:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/18/17 12:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/18/17 12:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/18/17 12:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/18/17 12:52	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/18/17 12:52	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/18/17 12:52	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	1		11/18/17 12:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 12:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/18/17 12:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 12:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 12:52	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/18/17 12:52	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/18/17 12:52	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 406	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 421	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 427	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 428	ND	ug/L	1.0	1		11/18/17 12:52		
Haloether 508	**123**	ug/L	1.0	1		11/18/17 12:52		
Haloether 528	ND	ug/L	1.0	1		11/18/17 12:52		
Halomar	ND	ug/L	1.0	1		11/18/17 12:52		
2-Hexanone	ND	ug/L	2.0	1		11/18/17 12:52	591-78-6	
Isoflurane	**10.5**	ug/L	1.0	1		11/18/17 12:52		
Methoxyflurane	ND	ug/L	1.0	1		11/18/17 12:52	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/18/17 12:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/18/17 12:52	108-10-1	
Styrene	ND	ug/L	1.0	1		11/18/17 12:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/18/17 12:52	79-34-5	
Tetrachloroethene	**5.0**	ug/L	1.0	1		11/18/17 12:52	127-18-4	
Toluene	ND	ug/L	1.0	1		11/18/17 12:52	108-88-3	
Total Haloether	**134**	ug/L	1.0	1		11/18/17 12:52		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/18/17 12:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/18/17 12:52	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FMW-5-90-BP **Lab ID: 2065329004** Collected: 11/08/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/18/17 12:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/18/17 12:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/18/17 12:52	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/18/17 12:52	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/18/17 12:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/18/17 12:52	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/18/17 12:52	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/18/17 12:52	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		11/18/17 12:52	1868-53-7	

Sample: EB-20171109 **Lab ID: 2065329005** Collected: 11/09/17 08:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 12:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 12:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 12:43	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 12:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 12:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 12:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 12:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 12:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 12:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 12:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 12:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 12:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 12:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 12:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 12:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 12:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 12:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 12:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 12:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 12:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 406	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 421	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 427	ND	ug/L	1.0	1		11/17/17 12:43		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: EB-20171109 **Lab ID: 2065329005** Collected: 11/09/17 08:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 508	ND	ug/L	1.0	1		11/17/17 12:43		
Haloether 528	ND	ug/L	1.0	1		11/17/17 12:43		
Halomar	ND	ug/L	1.0	1		11/17/17 12:43		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 12:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 12:43		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 12:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 12:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 12:43	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 12:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 12:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 12:43	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 12:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 12:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 12:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 12:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 12:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 12:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 12:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 12:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 12:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 12:43	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 12:43	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 12:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/17/17 12:43	1868-53-7	

Sample: FB-20171109 **Lab ID: 2065329006** Collected: 11/09/17 10:04 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 13:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:00	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 13:00	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FB-20171109 **Lab ID: 2065329006** Collected: 11/09/17 10:04 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 13:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 508	ND	ug/L	1.0	1		11/17/17 13:00		
Haloether 528	ND	ug/L	1.0	1		11/17/17 13:00		
Halomar	ND	ug/L	1.0	1		11/17/17 13:00		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:00	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 13:00		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 13:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:00	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 13:00	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:00	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 13:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 13:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:00	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 13:00	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 13:00	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/17/17 13:00	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-1C-1BR-A-BP **Lab ID: 2065329007** Collected: 11/09/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/18/17 13:10	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/18/17 13:10	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/18/17 13:10	107-13-1	
Benzene	ND	ug/L	1.0	1		11/18/17 13:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/18/17 13:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/18/17 13:10	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/18/17 13:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/18/17 13:10	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/18/17 13:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/18/17 13:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/18/17 13:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/18/17 13:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/18/17 13:10	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/18/17 13:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/18/17 13:10	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/18/17 13:10	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:10	75-35-4	
cis-1,2-Dichloroethene	**3.2**	ug/L	1.0	1		11/18/17 13:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/18/17 13:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:10	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/18/17 13:10	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/18/17 13:10	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 406	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 421	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 427	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 428	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 508	ND	ug/L	1.0	1		11/18/17 13:10		
Haloether 528	ND	ug/L	1.0	1		11/18/17 13:10		
Halomar	ND	ug/L	1.0	1		11/18/17 13:10		
2-Hexanone	ND	ug/L	2.0	1		11/18/17 13:10	591-78-6	
Isoflurane	**9.5**	ug/L	1.0	1		11/18/17 13:10		
Methoxyflurane	ND	ug/L	1.0	1		11/18/17 13:10	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/18/17 13:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/18/17 13:10	108-10-1	
Styrene	ND	ug/L	1.0	1		11/18/17 13:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/18/17 13:10	79-34-5	
Tetrachloroethene	**16.6**	ug/L	1.0	1		11/18/17 13:10	127-18-4	
Toluene	ND	ug/L	1.0	1		11/18/17 13:10	108-88-3	
Total Haloether	**9.5**	ug/L	1.0	1		11/18/17 13:10		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/18/17 13:10	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-1C-1BR-A-BP **Lab ID: 2065329007** Collected: 11/09/17 12:31 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/18/17 13:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/18/17 13:10	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/18/17 13:10	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/18/17 13:10	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/18/17 13:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/18/17 13:10	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/18/17 13:10	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		11/18/17 13:10	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		11/18/17 13:10	1868-53-7	

Sample: EB-20171110 **Lab ID: 2065329008** Collected: 11/10/17 08:55 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 13:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:18	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 13:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 13:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:18	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:18		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: EB-20171110 **Lab ID: 2065329008** Collected: 11/10/17 08:55 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 508	ND	ug/L	1.0	1		11/17/17 13:18		
Haloether 528	ND	ug/L	1.0	1		11/17/17 13:18		
Halomar	ND	ug/L	1.0	1		11/17/17 13:18		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:18	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 13:18		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 13:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:18	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 13:18	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:18	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 13:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 13:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:18	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 13:18	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 13:18	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/17/17 13:18	1868-53-7	

Sample: FB-20171110 **Lab ID: 2065329009** Collected: 11/10/17 09:46 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.5**	ug/L	4.0	1		11/17/17 13:37	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:37	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:37	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:37	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:37	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/17/17 13:37	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: FB-20171110 **Lab ID: 2065329009** Collected: 11/10/17 09:46 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:37	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:37	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:37	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/17/17 13:37	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:37	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 508	ND	ug/L	1.0	1		11/17/17 13:37		
Haloether 528	ND	ug/L	1.0	1		11/17/17 13:37		
Halomar	ND	ug/L	1.0	1		11/17/17 13:37		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:37	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/17/17 13:37		
Methoxyflurane	ND	ug/L	1.0	1		11/17/17 13:37	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:37	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/17/17 13:37	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:37	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/17/17 13:37		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/17/17 13:37	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:37	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:37	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		11/17/17 13:37	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/17/17 13:37	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		11/17/17 13:37	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-4B-1BR-BP **Lab ID: 2065329010** Collected: 11/10/17 11:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/18/17 13:28	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/18/17 13:28	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/18/17 13:28	107-13-1	
Benzene	ND	ug/L	1.0	1		11/18/17 13:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/18/17 13:28	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/18/17 13:28	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/18/17 13:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/18/17 13:28	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/18/17 13:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/18/17 13:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/18/17 13:28	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/18/17 13:28	75-00-3	
Chloroform	**1.4**	ug/L	1.0	1		11/18/17 13:28	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/18/17 13:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/18/17 13:28	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/18/17 13:28	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/18/17 13:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/18/17 13:28	10061-02-6	
Enflurane	**7.4**	ug/L	1.0	1		11/18/17 13:28	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/18/17 13:28	100-41-4	
Haloether 229	**35.5**	ug/L	1.0	1		11/18/17 13:28		
Haloether 406	**1.5**	ug/L	1.0	1		11/18/17 13:28		
Haloether 421	ND	ug/L	1.0	1		11/18/17 13:28		
Haloether 427	ND	ug/L	1.0	1		11/18/17 13:28		
Haloether 428	ND	ug/L	1.0	1		11/18/17 13:28		
Haloether 508	**146**	ug/L	1.0	1		11/18/17 13:28		
Haloether 528	ND	ug/L	1.0	1		11/18/17 13:28		
Halomar	**6.1**	ug/L	1.0	1		11/18/17 13:28		
2-Hexanone	ND	ug/L	2.0	1		11/18/17 13:28	591-78-6	
Isoflurane	**103**	ug/L	1.0	1		11/18/17 13:28		
Methoxyflurane	**1.7**	ug/L	1.0	1		11/18/17 13:28	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/18/17 13:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/18/17 13:28	108-10-1	
Styrene	ND	ug/L	1.0	1		11/18/17 13:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/18/17 13:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/18/17 13:28	127-18-4	
Toluene	ND	ug/L	1.0	1		11/18/17 13:28	108-88-3	
Total Haloether	**301**	ug/L	1.0	1		11/18/17 13:28		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/18/17 13:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/18/17 13:28	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-4B-1BR-BP **Lab ID: 2065329010** Collected: 11/10/17 11:20 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/18/17 13:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/18/17 13:28	96-18-4	
1,1,2-Trichlorotrifluoroethane	**4.8**	ug/L	1.0	1		11/18/17 13:28	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/18/17 13:28	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/18/17 13:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/18/17 13:28	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		11/18/17 13:28	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		11/18/17 13:28	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/18/17 13:28	1868-53-7	

Sample: MW-4B-3-BP **Lab ID: 2065329011** Collected: 11/10/17 12:38 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/17/17 13:55	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/17/17 13:55	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/17/17 13:55	107-13-1	
Benzene	ND	ug/L	1.0	1		11/17/17 13:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/17/17 13:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/17/17 13:55	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/17/17 13:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/17/17 13:55	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/17/17 13:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/17/17 13:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/17/17 13:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/17/17 13:55	75-00-3	
Chloroform	**1.0**	ug/L	1.0	1		11/17/17 13:55	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/17/17 13:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/17/17 13:55	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/17/17 13:55	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:55	75-35-4	
cis-1,2-Dichloroethene	**1.2**	ug/L	1.0	1		11/17/17 13:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/17/17 13:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/17/17 13:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/17/17 13:55	10061-02-6	
Enflurane	**6.4**	ug/L	1.0	1		11/17/17 13:55	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/17/17 13:55	100-41-4	
Haloether 229	**11.0**	ug/L	1.0	1		11/17/17 13:55		
Haloether 406	ND	ug/L	1.0	1		11/17/17 13:55		~~M1~~
Haloether 421	ND	ug/L	1.0	1		11/17/17 13:55		
Haloether 427	ND	ug/L	1.0	1		11/17/17 13:55		~~M1~~

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065329

Sample: MW-4B-3-BP **Lab ID: 2065329011** Collected: 11/10/17 12:38 Received: 11/15/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/17/17 13:55		
Haloether 508	**145**	ug/L	2.0	2		11/18/17 13:46		D
Haloether 528	**3.8**	ug/L	1.0	1		11/17/17 13:55		
Halomar	**4.4**	ug/L	1.0	1		11/17/17 13:55		
2-Hexanone	ND	ug/L	2.0	1		11/17/17 13:55	591-78-6	
Isoflurane	**58.1**	ug/L	1.0	1		11/17/17 13:55		
Methoxyflurane	**1.2**	ug/L	1.0	1		11/17/17 13:55	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/17/17 13:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/17/17 13:55	108-10-1	
Styrene	ND	ug/L	1.0	1		11/17/17 13:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/17/17 13:55	79-34-5	
Tetrachloroethene	**12.6**	ug/L	1.0	1		11/17/17 13:55	127-18-4	
Toluene	ND	ug/L	1.0	1		11/17/17 13:55	108-88-3	
Total Haloether	**229**	ug/L	2.0	2		11/18/17 13:46		D
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/17/17 13:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/17/17 13:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/17/17 13:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/17/17 13:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	**5.5**	ug/L	1.0	1		11/17/17 13:55	76-13-1	~~M1~~ J
Vinyl chloride	ND	ug/L	1.0	1		11/17/17 13:55	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/17/17 13:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/17/17 13:55	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		11/17/17 13:55	2037-26-5	
Toluene-d8 (S)	101	%.	79-119	2		11/18/17 13:46	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	2		11/18/17 13:46	460-00-4	
4-Bromofluorobenzene (S)	101	%.	68-124	1		11/17/17 13:55	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	2		11/18/17 13:46	1868-53-7	
Dibromofluoromethane (S)	101	%.	72-126	1		11/17/17 13:55	1868-53-7	

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2065329

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Company: ARCADIS	Report To: David Howard	Attention:
Address: 410 North 44th St.	Copy To:	Company Name:
Phoenix, AZ 85008		Address:
Email: david.howard@arcadis-us.com	Purchase Order #:	Pace Quote:
Phone: NONE Fax:	Project Name: Fibers	Pace Project Manager: justin.stock@pacelabs.com,
Requested Due Date:	Project #: C0001913.0005.1702B	Pace Profile #: 1037

Regulatory Agency	State / Location
	PR

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	8260- VOCs + Halos	Trip BLANK	Residual Chlorine (Y/N)
1	TB-20171107	WT	G			11/07/17	LAB		2				X							X	
2	EB-20171108	WT	G			11/08/17	0909		3				3						X		
3	FB-20171108	WT	G			11/08/17	1017		3				3						X		
4	FMW-5-90-BD	WT	G			11/08/17	1231		3				3						X		
5	EB-20171109	WT	G			11/09/17	0820		3				3						X		
6	FB-20171109	WT	G			11/09/17	1004		3				3						X		
7	MW-1C-1BRA-BD	WT	G			11/09/17	1231		3				3						X		
8	EB-20171110	WT	G			11/10/17	0555		3				3						X		
9	FB-20171110	WT	G			11/10/17	0946		3				3						X		
10	MW-4B-1BP	WT	G			11/10/17	1120		3				3						X		
11	MW-4B-3BP	WT	G			11/10/17	1238		3				3						X		
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andy Colson / Arcadis	11/10/17	1558	[illegible] / Pace	11-10-17	15:58	
	[illegible] / Pace	11-14-17	7:00	FedEx			
	[illegible] / Pace	11-15-17	10:00	[illegible] / Pace	11-10-17	10:00	1.8
	FedEx						

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER: Andy Colson	
SIGNATURE of SAMPLER: [illegible]	DATE Signed: 11/10/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	Y	Y

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2065701
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29183R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2065701 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171113	2065701001	Water	11/13/2017		X				
EB-20171113	2065701002	Water	11/13/2017		X				
FB-20171113	2065701003	Water	11/13/2017		X				
MW-1B-1BR-BP	2065701004	Water	11/13/2017		X				
MW-1B-4-BP	2065701005	Water	11/13/2017		X				
PCMW-2-BP	2065701006	Water	11/13/2017		X				
EB-20171114	2065701007	Water	11/14/2017		X				
FB-20171114	2065701008	Water	11/14/2017		X				
MW-2C-3-BP	2065701009	Water	11/14/2017		X				
FMW-3-90-BP	2065701010	Water	11/14/2017		X				
FMW-2-90-BP	2065701011	Water	11/14/2017		X				
EB-20171115	2065701012	Water	11/15/2017		X				
FB-20171115	2065701013	Water	11/15/2017		X				
FMW-5-90	2065701014	Water	11/15/2017		X				
MW-4B-1BR	2065701015	Water	11/15/2017		X				
EB-20171717	2065701016	Water	11/17/2017		X				
FB-20171717	2065701017	Water	11/17/2017		X				
MW-1C-1BR-A	2065701018	Water	11/17/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-1B-1BR-BP for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-4B-1BR MW-1C-1BR-A	Acetone (EB)	Detected sample results >RL and <BAL	"UB" at detected sample concentration

RL Reporting limit
EB Equipment Blank

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-1B-1BR-BP	Tetrachloroethene	>UL	AC
	Haloether 427	>UL	>UL

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
MW-1B-1BR-BP	Haloether 229

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location associated with this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X	X		
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: January 27, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: TB-20171113 **Lab ID: 2065701001** Collected: 11/13/17 00:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 19:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 19:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 19:57	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 19:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 19:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 19:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 19:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 19:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 19:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 19:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 19:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 19:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 19:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 19:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 19:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 19:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 19:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 19:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 19:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 19:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 406	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 421	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 427	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 428	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 508	ND	ug/L	1.0	1		11/22/17 19:57		
Haloether 528	ND	ug/L	1.0	1		11/22/17 19:57		
Halomar	ND	ug/L	1.0	1		11/22/17 19:57		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 19:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 19:57		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 19:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 19:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 19:57	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 19:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 19:57	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 19:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 19:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 19:57	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: TB-20171113 **Lab ID: 2065701001** Collected: 11/13/17 00:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 19:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 19:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 19:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 19:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 19:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 19:57	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 19:57	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/22/17 19:57	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 19:57	1868-53-7	

Sample: EB-20171113 **Lab ID: 2065701002** Collected: 11/13/17 08:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.7**	ug/L	4.0	1		11/22/17 20:14	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 20:14	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 20:14	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 20:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:14	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 20:14	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 20:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 20:14	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 20:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:14	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:14	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:14	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 20:14	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:14	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 406	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 421	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 427	ND	ug/L	1.0	1		11/22/17 20:14		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171113 **Lab ID: 2065701002** Collected: 11/13/17 08:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 508	ND	ug/L	1.0	1		11/22/17 20:14		
Haloether 528	ND	ug/L	1.0	1		11/22/17 20:14		
Halomar	ND	ug/L	1.0	1		11/22/17 20:14		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 20:14	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 20:14		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 20:14	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 20:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 20:14	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 20:14	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:14	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 20:14		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 20:14	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:14	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:14	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 20:14	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		11/22/17 20:14	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 20:14	1868-53-7	

Sample: FB-20171113 **Lab ID: 2065701003** Collected: 11/13/17 09:02 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.2**	ug/L	4.0	1		11/22/17 20:32	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 20:32	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 20:32	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 20:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:32	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 20:32	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 20:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 20:32	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 20:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:32	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:32	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:32	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171113 **Lab ID: 2065701003** Collected: 11/13/17 09:02 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:32	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:32	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:32	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 20:32	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:32	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 406	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 421	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 427	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 428	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 508	ND	ug/L	1.0	1		11/22/17 20:32		
Haloether 528	ND	ug/L	1.0	1		11/22/17 20:32		
Halomar	ND	ug/L	1.0	1		11/22/17 20:32		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 20:32	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 20:32		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 20:32	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 20:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 20:32	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 20:32	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:32	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 20:32		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 20:32	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:32	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:32	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:32	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 20:32	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 20:32	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 20:32	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1B-1BR-BP **Lab ID: 2065701004** Collected: 11/13/17 10:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 18:10	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 18:10	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 18:10	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 18:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 18:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 18:10	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 18:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 18:10	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 18:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 18:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 18:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 18:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 18:10	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 18:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 18:10	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 18:10	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:10	75-35-4	
cis-1,2-Dichloroethene	**4.7**	ug/L	1.0	1		11/22/17 18:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:10	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 18:10	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 18:10	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 18:10		~~R1~~ UJ
Haloether 406	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 421	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 427	ND	ug/L	1.0	1		11/22/17 18:10		~~M1~~
Haloether 428	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 508	ND	ug/L	1.0	1		11/22/17 18:10		
Haloether 528	ND	ug/L	1.0	1		11/22/17 18:10		
Halomar	ND	ug/L	1.0	1		11/22/17 18:10		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 18:10	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 18:10		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 18:10	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 18:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 18:10	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 18:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:10	79-34-5	
Tetrachloroethene	**53.4**	ug/L	1.0	1		11/22/17 18:10	127-18-4	~~M1~~ J
Toluene	ND	ug/L	1.0	1		11/22/17 18:10	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 18:10		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:10	79-00-5	
Trichloroethene	**3.5**	ug/L	1.0	1		11/22/17 18:10	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1B-1BR-BP **Lab ID: 2065701004** Collected: 11/13/17 10:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	**1.5**	ug/L	1.0	1		11/22/17 18:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 18:10	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 18:10	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 18:10	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 18:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 18:10	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		11/22/17 18:10	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		11/22/17 18:10	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 18:10	1868-53-7	

Sample: MW-1B-4-BP **Lab ID: 2065701005** Collected: 11/13/17 12:03 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 20:50	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 20:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 20:50	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 20:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:50	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 20:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 20:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 20:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 20:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:50	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 20:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:50	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 406	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 421	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 427	ND	ug/L	1.0	1		11/22/17 20:50		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1B-4-BP **Lab ID: 2065701005** Collected: 11/13/17 12:03 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 508	ND	ug/L	1.0	1		11/22/17 20:50		
Haloether 528	ND	ug/L	1.0	1		11/22/17 20:50		
Halomar	ND	ug/L	1.0	1		11/22/17 20:50		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 20:50	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 20:50		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 20:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 20:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 20:50	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:50	79-34-5	
Tetrachloroethene	**1.6**	ug/L	1.0	1		11/22/17 20:50	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:50	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 20:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 20:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:50	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		11/22/17 20:50	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 20:50	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		11/22/17 20:50	1868-53-7	

Sample: PCMW-2-BP **Lab ID: 2065701006** Collected: 11/13/17 13:40 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 21:08	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 21:08	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 21:08	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 21:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 21:08	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 21:08	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 21:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 21:08	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 21:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 21:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 21:08	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 21:08	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 21:08	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: PCMW-2-BP **Lab ID: 2065701006** Collected: 11/13/17 13:40 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 21:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 21:08	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 21:08	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:08	75-35-4	
cis-1,2-Dichloroethene	**2.2**	ug/L	1.0	1		11/22/17 21:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 21:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:08	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 21:08	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 21:08	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 406	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 421	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 427	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 428	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 508	ND	ug/L	1.0	1		11/22/17 21:08		
Haloether 528	ND	ug/L	1.0	1		11/22/17 21:08		
Halomar	ND	ug/L	1.0	1		11/22/17 21:08		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 21:08	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 21:08		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 21:08	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 21:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 21:08	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 21:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 21:08	79-34-5	
Tetrachloroethene	**21.2**	ug/L	1.0	1		11/22/17 21:08	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 21:08	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 21:08		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:08	79-00-5	
Trichloroethene	**2.5**	ug/L	1.0	1		11/22/17 21:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 21:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 21:08	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 21:08	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 21:08	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 21:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 21:08	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 21:08	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		11/22/17 21:08	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		11/22/17 21:08	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171114 **Lab ID: 2065701007** Collected: 11/14/17 08:38 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.1**	ug/L	4.0	1		11/22/17 21:26	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 21:26	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 21:26	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 21:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 21:26	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 21:26	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 21:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 21:26	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 21:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 21:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 21:26	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 21:26	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 21:26	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 21:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 21:26	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 21:26	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 21:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:26	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 21:26	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 21:26	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 406	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 421	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 427	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 428	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 508	ND	ug/L	1.0	1		11/22/17 21:26		
Haloether 528	ND	ug/L	1.0	1		11/22/17 21:26		
Halomar	ND	ug/L	1.0	1		11/22/17 21:26		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 21:26	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 21:26		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 21:26	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 21:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 21:26	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 21:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 21:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 21:26	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 21:26	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 21:26		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 21:26	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171114 **Lab ID: 2065701007** Collected: 11/14/17 08:38 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 21:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 21:26	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 21:26	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 21:26	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 21:26	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 21:26	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 21:26	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		11/22/17 21:26	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 21:26	1868-53-7	

Sample: FB-20171114 **Lab ID: 2065701008** Collected: 11/14/17 09:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 21:44	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 21:44	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 21:44	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 21:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 21:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 21:44	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 21:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 21:44	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 21:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 21:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 21:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 21:44	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 21:44	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 21:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 21:44	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 21:44	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 21:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 21:44	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 21:44	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 21:44	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 406	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 421	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 427	ND	ug/L	1.0	1		11/22/17 21:44		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171114 **Lab ID: 2065701008** Collected: 11/14/17 09:00 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 508	ND	ug/L	1.0	1		11/22/17 21:44		
Haloether 528	ND	ug/L	1.0	1		11/22/17 21:44		
Halomar	ND	ug/L	1.0	1		11/22/17 21:44		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 21:44	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 21:44		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 21:44	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 21:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 21:44	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 21:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 21:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 21:44	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 21:44	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 21:44		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 21:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 21:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 21:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 21:44	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 21:44	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 21:44	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 21:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 21:44	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/22/17 21:44	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		11/22/17 21:44	460-00-4	
Dibromofluoromethane (S)	95	%.	72-126	1		11/22/17 21:44	1868-53-7	

Sample: MW-2C-3-BP **Lab ID: 2065701009** Collected: 11/14/17 10:21 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:01	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 22:01	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-2C-3-BP **Lab ID: 2065701009** Collected: 11/14/17 10:21 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:01	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		11/22/17 22:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:01	100-41-4	
Haloether 229	**34.5**	ug/L	1.0	1		11/22/17 22:01		
Haloether 406	**1.1**	ug/L	1.0	1		11/22/17 22:01		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:01		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:01		
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:01		
Haloether 508	**29.1**	ug/L	1.0	1		11/22/17 22:01		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:01		
Halomar	ND	ug/L	1.0	1		11/22/17 22:01		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:01	591-78-6	
Isoflurane	**147**	ug/L	1.0	1		11/22/17 22:01		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:01	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:01	79-34-5	
Tetrachloroethene	**2.9**	ug/L	1.0	1		11/22/17 22:01	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:01	108-88-3	
Total Haloether	**213**	ug/L	1.0	1		11/22/17 22:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 22:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 22:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:01	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 22:01	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 22:01	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		11/22/17 22:01	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-3-90-BP **Lab ID: 2065701010** Collected: 11/14/17 11:39 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:19	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:19	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:19	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:19	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:19	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 22:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:19	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:19	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:19	75-35-4	
cis-1,2-Dichloroethene	**1.5**	ug/L	1.0	1		11/22/17 22:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:19	10061-02-6	
Enflurane	**5.5**	ug/L	1.0	1		11/22/17 22:19	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:19	100-41-4	
Haloether 229	**3.7**	ug/L	1.0	1		11/22/17 22:19		
Haloether 406	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:19		
Haloether 508	**75.5**	ug/L	1.0	1		11/22/17 22:19		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:19		
Halomar	**2.3**	ug/L	1.0	1		11/22/17 22:19		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:19	591-78-6	
Isoflurane	**30.8**	ug/L	1.0	1		11/22/17 22:19		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:19	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:19	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:19	79-34-5	
Tetrachloroethene	**24.8**	ug/L	1.0	1		11/22/17 22:19	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:19	108-88-3	
Total Haloether	**118**	ug/L	1.0	1		11/22/17 22:19		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:19	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-3-90-BP **Lab ID: 2065701010** Collected: 11/14/17 11:39 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	**1.0**	ug/L	1.0	1		11/22/17 22:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:19	96-18-4	
1,1,2-Trichlorotrifluoroethane	**2.3**	ug/L	1.0	1		11/22/17 22:19	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:19	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:19	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 22:19	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		11/22/17 22:19	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 22:19	1868-53-7	

Sample: FMW-2-90-BP **Lab ID: 2065701011** Collected: 11/14/17 13:17 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:37	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:37	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:37	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:37	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:37	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:37	75-00-3	
Chloroform	**1.5**	ug/L	1.0	1		11/22/17 22:37	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:37	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:37	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:37	10061-02-6	
Enflurane	**13.7**	ug/L	1.0	1		11/22/17 22:37	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:37	100-41-4	
Haloether 229	**14.1**	ug/L	1.0	1		11/22/17 22:37		
Haloether 406	**1.9**	ug/L	1.0	1		11/22/17 22:37		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:37		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:37		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-2-90-BP **Lab ID: 2065701011** Collected: 11/14/17 13:17 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:37		
Haloether 508	**109**	ug/L	1.0	1		11/22/17 22:37		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:37		
Halomar	**4.1**	ug/L	1.0	1		11/22/17 22:37		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:37	591-78-6	
Isoflurane	**74.6**	ug/L	1.0	1		11/22/17 22:37		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:37	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:37	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:37	79-34-5	
Tetrachloroethene	**11.3**	ug/L	1.0	1		11/22/17 22:37	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:37	108-88-3	
Total Haloether	**217**	ug/L	1.0	1		11/22/17 22:37		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 22:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	**2.9**	ug/L	1.0	1		11/22/17 22:37	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:37	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:37	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 22:37	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 22:37	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		11/22/17 22:37	1868-53-7	

Sample: EB-20171115 **Lab ID: 2065701012** Collected: 11/15/17 07:58 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 22:55	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 22:55	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 22:55	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 22:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 22:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 22:55	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 22:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 22:55	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 22:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 22:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 22:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 22:55	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 22:55	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171115 **Lab ID: 2065701012** Collected: 11/15/17 07:58 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 22:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 22:55	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 22:55	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 22:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 22:55	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 22:55	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 22:55	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 406	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 421	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 427	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 428	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 508	ND	ug/L	1.0	1		11/22/17 22:55		
Haloether 528	ND	ug/L	1.0	1		11/22/17 22:55		
Halomar	ND	ug/L	1.0	1		11/22/17 22:55		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 22:55	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 22:55		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 22:55	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 22:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 22:55	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 22:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 22:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 22:55	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 22:55	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 22:55		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 22:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 22:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 22:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 22:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 22:55	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 22:55	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 22:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 22:55	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		11/22/17 22:55	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/22/17 22:55	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		11/22/17 22:55	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171115 **Lab ID: 2065701013** Collected: 11/15/17 08:51 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		11/22/17 23:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 23:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 23:12	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 23:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 23:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 23:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 23:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 23:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 23:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 23:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 23:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 23:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 23:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 23:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 23:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 23:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 23:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 23:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 23:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 406	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 421	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 427	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 428	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 508	ND	ug/L	1.0	1		11/22/17 23:12		
Haloether 528	ND	ug/L	1.0	1		11/22/17 23:12		
Halomar	ND	ug/L	1.0	1		11/22/17 23:12		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 23:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/22/17 23:12		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 23:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 23:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 23:12	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 23:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 23:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 23:12	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 23:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/22/17 23:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 23:12	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171115 **Lab ID: 2065701013** Collected: 11/15/17 08:51 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 23:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 23:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 23:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 23:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 23:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 23:12	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		11/22/17 23:12	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		11/22/17 23:12	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		11/22/17 23:12	1868-53-7	

Sample: FMW-5-90 **Lab ID: 2065701014** Collected: 11/15/17 10:27 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		11/22/17 23:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/22/17 23:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 23:30	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 23:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 23:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 23:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 23:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 23:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 23:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 23:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 23:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 23:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 23:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 23:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 23:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 23:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 23:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/22/17 23:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 23:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 406	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 421	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 427	ND	ug/L	1.0	1		11/22/17 23:30		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FMW-5-90 **Lab ID: 2065701014** Collected: 11/15/17 10:27 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/22/17 23:30		
Haloether 508	**97.3**	ug/L	1.0	1		11/22/17 23:30		
Haloether 528	ND	ug/L	1.0	1		11/22/17 23:30		
Halomar	ND	ug/L	1.0	1		11/22/17 23:30		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 23:30	591-78-6	
Isoflurane	**8.5**	ug/L	1.0	1		11/22/17 23:30		
Methoxyflurane	ND	ug/L	1.0	1		11/22/17 23:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 23:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 23:30	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 23:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 23:30	79-34-5	
Tetrachloroethene	**5.1**	ug/L	1.0	1		11/22/17 23:30	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 23:30	108-88-3	
Total Haloether	**106**	ug/L	1.0	1		11/22/17 23:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 23:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 23:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 23:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 23:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 23:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 23:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 23:30	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 23:30	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		11/22/17 23:30	460-00-4	
Dibromofluoromethane (S)	94	%.	72-126	1		11/22/17 23:30	1868-53-7	

Sample: MW-4B-1BR **Lab ID: 2065701015** Collected: 11/15/17 12:19 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.1**	ug/L	4.0	1		11/22/17 23:48	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		11/22/17 23:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/22/17 23:48	107-13-1	
Benzene	ND	ug/L	1.0	1		11/22/17 23:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 23:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/22/17 23:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/22/17 23:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/22/17 23:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/22/17 23:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 23:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 23:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 23:48	75-00-3	
Chloroform	**1.1**	ug/L	1.0	1		11/22/17 23:48	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-4B-1BR **Lab ID: 2065701015** Collected: 11/15/17 12:19 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/22/17 23:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 23:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 23:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 23:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/22/17 23:48	10061-02-6	
Enflurane	**6.2**	ug/L	1.0	1		11/22/17 23:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 23:48	100-41-4	
Haloether 229	**17.2**	ug/L	1.0	1		11/22/17 23:48		
Haloether 406	**1.1**	ug/L	1.0	1		11/22/17 23:48		
Haloether 421	ND	ug/L	1.0	1		11/22/17 23:48		
Haloether 427	ND	ug/L	1.0	1		11/22/17 23:48		
Haloether 428	ND	ug/L	1.0	1		11/22/17 23:48		
Haloether 508	**16.7**	ug/L	1.0	1		11/22/17 23:48		
Haloether 528	ND	ug/L	1.0	1		11/22/17 23:48		
Halomar	**4.7**	ug/L	1.0	1		11/22/17 23:48		
2-Hexanone	ND	ug/L	2.0	1		11/22/17 23:48	591-78-6	
Isoflurane	**163**	ug/L	1.0	1		11/22/17 23:48		
Methoxyflurane	**1.0**	ug/L	1.0	1		11/22/17 23:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/22/17 23:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/22/17 23:48	108-10-1	
Styrene	ND	ug/L	1.0	1		11/22/17 23:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 23:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 23:48	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 23:48	108-88-3	
Total Haloether	**210**	ug/L	1.0	1		11/22/17 23:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 23:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 23:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 23:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 23:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/22/17 23:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 23:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 23:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 23:48	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/22/17 23:48	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		11/22/17 23:48	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		11/22/17 23:48	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171717 **Lab ID: 2065701016** Collected: 11/17/17 08:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.7**	ug/L	4.0	1		11/23/17 01:17	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/23/17 01:17	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/23/17 01:17	107-13-1	
Benzene	ND	ug/L	1.0	1		11/23/17 01:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/23/17 01:17	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/23/17 01:17	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/23/17 01:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/23/17 01:17	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/23/17 01:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/23/17 01:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/23/17 01:17	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/23/17 01:17	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/23/17 01:17	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/23/17 01:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/23/17 01:17	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/23/17 01:17	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/23/17 01:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:17	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/23/17 01:17	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/23/17 01:17	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 406	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 421	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 427	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 428	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 508	ND	ug/L	1.0	1		11/23/17 01:17		
Haloether 528	ND	ug/L	1.0	1		11/23/17 01:17		
Halomar	ND	ug/L	1.0	1		11/23/17 01:17		
2-Hexanone	ND	ug/L	2.0	1		11/23/17 01:17	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/23/17 01:17		
Methoxyflurane	ND	ug/L	1.0	1		11/23/17 01:17	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/23/17 01:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/23/17 01:17	108-10-1	
Styrene	ND	ug/L	1.0	1		11/23/17 01:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/23/17 01:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/23/17 01:17	127-18-4	
Toluene	ND	ug/L	1.0	1		11/23/17 01:17	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/23/17 01:17		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/23/17 01:17	79-01-6	

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St. Rose, LA 70087
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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: EB-20171717 **Lab ID: 2065701016** Collected: 11/17/17 08:20 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		11/23/17 01:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/23/17 01:17	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/23/17 01:17	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/23/17 01:17	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/23/17 01:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/23/17 01:17	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/23/17 01:17	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		11/23/17 01:17	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		11/23/17 01:17	1868-53-7	

Sample: FB-20171717 **Lab ID: 2065701017** Collected: 11/17/17 09:45 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.6**	ug/L	4.0	1		11/23/17 01:35	67-64-1	
Acrolein	ND	ug/L	8.0	1		11/23/17 01:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/23/17 01:35	107-13-1	
Benzene	ND	ug/L	1.0	1		11/23/17 01:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/23/17 01:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/23/17 01:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/23/17 01:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/23/17 01:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/23/17 01:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/23/17 01:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/23/17 01:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/23/17 01:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/23/17 01:35	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/23/17 01:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/23/17 01:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/23/17 01:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/23/17 01:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/23/17 01:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/23/17 01:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 406	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 421	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 427	ND	ug/L	1.0	1		11/23/17 01:35		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: FB-20171717 **Lab ID: 2065701017** Collected: 11/17/17 09:45 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 508	ND	ug/L	1.0	1		11/23/17 01:35		
Haloether 528	ND	ug/L	1.0	1		11/23/17 01:35		
Halomar	ND	ug/L	1.0	1		11/23/17 01:35		
2-Hexanone	ND	ug/L	2.0	1		11/23/17 01:35	591-78-6	
Isoflurane	ND	ug/L	1.0	1		11/23/17 01:35		
Methoxyflurane	ND	ug/L	1.0	1		11/23/17 01:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/23/17 01:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/23/17 01:35	108-10-1	
Styrene	ND	ug/L	1.0	1		11/23/17 01:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/23/17 01:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/23/17 01:35	127-18-4	
Toluene	ND	ug/L	1.0	1		11/23/17 01:35	108-88-3	
Total Haloether	ND	ug/L	1.0	1		11/23/17 01:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/23/17 01:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/23/17 01:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/23/17 01:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/23/17 01:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/23/17 01:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/23/17 01:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/23/17 01:35	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		11/23/17 01:35	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		11/23/17 01:35	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		11/23/17 01:35	1868-53-7	

Sample: MW-1C-1BR-A **Lab ID: 2065701018** Collected: 11/17/17 11:43 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.8**	ug/L	4.0	1		11/23/17 01:53	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		11/23/17 01:53	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		11/23/17 01:53	107-13-1	
Benzene	**4.2**	ug/L	1.0	1		11/23/17 01:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		11/23/17 01:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/23/17 01:53	75-25-2	
Bromomethane	ND	ug/L	1.0	1		11/23/17 01:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		11/23/17 01:53	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		11/23/17 01:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		11/23/17 01:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/23/17 01:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/23/17 01:53	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/23/17 01:53	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2065701

Sample: MW-1C-1BR-A **Lab ID: 2065701018** Collected: 11/17/17 11:43 Received: 11/22/17 10:22 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		11/23/17 01:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		11/23/17 01:53	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		11/23/17 01:53	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:53	75-35-4	
cis-1,2-Dichloroethene	**1.8**	ug/L	1.0	1		11/23/17 01:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/23/17 01:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/23/17 01:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/23/17 01:53	10061-02-6	
Enflurane	ND	ug/L	1.0	1		11/23/17 01:53	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		11/23/17 01:53	100-41-4	
Haloether 229	**1.5**	ug/L	1.0	1		11/23/17 01:53		
Haloether 406	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 421	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 427	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 428	ND	ug/L	1.0	1		11/23/17 01:53		
Haloether 508	**4.9**	ug/L	1.0	1		11/23/17 01:53		
Haloether 528	ND	ug/L	1.0	1		11/23/17 01:53		
Halomar	ND	ug/L	1.0	1		11/23/17 01:53		
2-Hexanone	ND	ug/L	2.0	1		11/23/17 01:53	591-78-6	
Isoflurane	**15.4**	ug/L	1.0	1		11/23/17 01:53		
Methoxyflurane	ND	ug/L	1.0	1		11/23/17 01:53	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		11/23/17 01:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		11/23/17 01:53	108-10-1	
Styrene	ND	ug/L	1.0	1		11/23/17 01:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/23/17 01:53	79-34-5	
Tetrachloroethene	**10.7**	ug/L	1.0	1		11/23/17 01:53	127-18-4	
Toluene	ND	ug/L	1.0	1		11/23/17 01:53	108-88-3	
Total Haloether	**21.8**	ug/L	1.0	1		11/23/17 01:53		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/23/17 01:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/23/17 01:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/23/17 01:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/23/17 01:53	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		11/23/17 01:53	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		11/23/17 01:53	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/23/17 01:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/23/17 01:53	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%.	79-119	1		11/23/17 01:53	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		11/23/17 01:53	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		11/23/17 01:53	1868-53-7	

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CHAIN-OF-CUSTODY / Ana

The Chain-of-Custody is a LEGAL DOCUM

WO# : 2065701

2065701

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171113	WT	G		~~A~~	11/13/17	LAB		2				2							X			
2	EB-20171113	WT	G			11/13/17	0800		3				3						X				
3	FB-20171113	WT	G			11/13/17	0902		3				3						X				
4	MW-1B-1BR-BP	WT	G			11/13/17	1020		3				3						X				
5	MW-1B-4-BP	WT	G			11/13/17	1203		3				3						X				
6	PCMW-2-BP	WT	G			11/13/17	1340		3				3						X				
7	EB-20171114	WT	G			11/14/17	0836		3				3						X				
8	FB-20171114	WT	G			11/14/17	0900		3				3						X				
9	MW-2C-3-BP	WT	G			11/14/17	1021		3				3						X				
10	FMW-3-90-BP	WT	G			11/14/17	1139		3				3						X				
11	FMW-2-90-BP	WT	G			11/14/17	1317		3				3						X				
12	EB-20171115	WT	G			11/15/17	0758		3				3						X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	11/17/17	1509	[signature] PACE	11/17/17	15:09	20	Y	N	Y
				Fed Ex						
	Fed Ex	11/21/17	0910	[signature] Pace	11/21/17	0910	0.2	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colom

SIGNATURE of SAMPLER: [signature]

DATE Signed: 11/17/17

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A — Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B — Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency	
State / Location	
	PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	FB-20171115	WT	G			11/15/17	0851		3				3						X				
2	FMW-5-90	WT	G			11/15/17	1027		3				3						X				
3	MW-4B-IBR	WT	G			11/15/17	1219		3				3						X				
4	FB-20171117	WT	G			11/17/17	0820		3				3						X				
5	FB-20171117	WT	G			11/17/17	0945		3				3						X				
6	MW-1C-IBRA	WT	G			11/17/17	1143		3				3						X				
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andi Colon / Arcadis	11/17/17	1509	[signature] PSLC	11/17/17	1509	4°	Y	N	Y
				Fed Ex						
	Fed Ex	11/21/17	0910	[signature] Pace	11/21/17	0910	0.2	Y	Y	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andi Colon

SIGNATURE of SAMPLER: [signature] DATE Signed: 11/17/17

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2066110
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29189R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2066110 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171127	2066110001	Water	11/27/2017		X				
EB-20171127	2066110002	Water	11/27/2017		X				
FB-20171127	2066110003	Water	11/27/2017		X				
FMW-2-90	2066110004	Water	11/27/2017		X				
MW-2C-3	2066110005	Water	11/27/2017		X				
EB-20171128	2066110006	Water	11/28/2017		X				
FB-20171128	2066110007	Water	11/28/2017		X				
PCMW-2	2066110008	Water	11/28/2017		X				
GWDUP001	2066110009	Water	11/28/2017	PCMW-2	X				
MW-1B-1BR	2066110010	Water	11/28/2017		X				
MW-1B-4	2066110011	Water	11/28/2017		X				
EB-20171129	2066110012	Water	11/29/2017		X				
FB-20171129	2066110013	Water	11/29/2017		X				
ES-21	2066110014	Water	11/29/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-1B-1BR for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the RL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
PCMW-2 / GWDUP001	cis-1,2-Dichloroethene	2.0	1.9	AC
	Tetrachloroethene	10.5	9.6	9.0%
	Trichloroethene	1.5	1.3	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Note: The laboratory qualified a Methylene Chloride results with a C9 qualifier to indicate that this compound is a “Common Laboratory Contaminant”. Methylene Chloride was not detected above the reporting limit in any samples (field and QC) associated with this SDG. This qualifier was removed for reporting purposes.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X		X	
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: January 28, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

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(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: TB-20171127 **Lab ID: 2066110001** Collected: 11/27/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 17:53	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 17:53	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 17:53	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 17:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 17:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 17:53	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 17:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 17:53	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 17:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 17:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 17:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 17:53	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 17:53	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 17:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 17:53	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 17:53	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 17:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 17:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 17:53	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 17:53	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 17:53	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 406	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 421	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 427	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 428	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 508	ND	ug/L	1.0	1		12/04/17 17:53		
Haloether 528	ND	ug/L	1.0	1		12/04/17 17:53		
Halomar	ND	ug/L	1.0	1		12/04/17 17:53		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 17:53	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 17:53		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 17:53	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 17:53	75-09-2	~~B,C9~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 17:53	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 17:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 17:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 17:53	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 17:53	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 17:53		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 17:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 17:53	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: TB-20171127 **Lab ID: 2066110001** Collected: 11/27/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 17:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 17:53	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 17:53	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 17:53	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 17:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 17:53	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 17:53	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/04/17 17:53	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/04/17 17:53	1868-53-7	

Sample: EB-20171127 **Lab ID: 2066110002** Collected: 11/27/17 09:35 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 18:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 18:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 18:29	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 18:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 18:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 18:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 18:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 18:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 18:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 18:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 18:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 18:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 18:29	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 18:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 18:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 18:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 18:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:29	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 18:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 18:29	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 406	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 421	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 427	ND	ug/L	1.0	1		12/04/17 18:29		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: EB-20171127 **Lab ID: 2066110002** Collected: 11/27/17 09:35 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 508	ND	ug/L	1.0	1		12/04/17 18:29		
Haloether 528	ND	ug/L	1.0	1		12/04/17 18:29		
Halomar	ND	ug/L	1.0	1		12/04/17 18:29		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 18:29	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 18:29		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 18:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 18:29	75-09-2	~~B,C9~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 18:29	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 18:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 18:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 18:29	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 18:29	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 18:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 18:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 18:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 18:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 18:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 18:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 18:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 18:29	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 18:29	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 18:29	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 18:29	1868-53-7	

Sample: FB-20171127 **Lab ID: 2066110003** Collected: 11/27/17 09:57 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 18:46	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 18:46	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 18:46	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 18:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 18:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 18:46	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 18:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 18:46	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 18:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 18:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 18:46	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 18:46	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 18:46	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171127 **Lab ID: 2066110003** Collected: 11/27/17 09:57 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 18:46	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 18:46	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 18:46	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 18:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:46	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 18:46	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 18:46	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 406	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 421	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 427	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 428	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 508	ND	ug/L	1.0	1		12/04/17 18:46		
Haloether 528	ND	ug/L	1.0	1		12/04/17 18:46		
Halomar	ND	ug/L	1.0	1		12/04/17 18:46		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 18:46	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 18:46		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 18:46	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 18:46	75-09-2	~~B~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 18:46	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 18:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 18:46	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 18:46	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 18:46	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 18:46		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 18:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 18:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 18:46	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 18:46	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 18:46	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 18:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 18:46	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 18:46	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		12/04/17 18:46	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/04/17 18:46	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FMW-2-90 **Lab ID: 2066110004** Collected: 11/27/17 11:22 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:04	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:04	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:04	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:04	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:04	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:04	75-00-3	
Chloroform	**1.4**	ug/L	1.0	1		12/04/17 19:04	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:04	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:04	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:04	10061-02-6	
Enflurane	**12.3**	ug/L	1.0	1		12/04/17 19:04	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:04	100-41-4	
Haloether 229	**14.5**	ug/L	1.0	1		12/04/17 19:04		
Haloether 406	**1.9**	ug/L	1.0	1		12/04/17 19:04		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:04		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:04		
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:04		
Haloether 508	**98.1**	ug/L	1.0	1		12/04/17 19:04		
Haloether 528	**1.0**	ug/L	1.0	1		12/04/17 19:04		
Halomar	**3.7**	ug/L	1.0	1		12/04/17 19:04		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:04	591-78-6	
Isoflurane	**70.4**	ug/L	1.0	1		12/04/17 19:04		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:04	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:04	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:04	79-34-5	
Tetrachloroethene	**9.4**	ug/L	1.0	1		12/04/17 19:04	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:04	108-88-3	
Total Haloether	**202**	ug/L	1.0	1		12/04/17 19:04		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:04	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FMW-2-90 **Lab ID: 2066110004** Collected: 11/27/17 11:22 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	**2.5**	ug/L	1.0	1		12/04/17 19:04	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:04	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:04	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		12/04/17 19:04	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/04/17 19:04	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/04/17 19:04	1868-53-7	

Sample: MW-2C-3 **Lab ID: 2066110005** Collected: 11/27/17 12:15 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:22	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:22	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 19:22	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 19:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:22	100-41-4	
Haloether 229	**14.7**	ug/L	1.0	1		12/04/17 19:22		
Haloether 406	ND	ug/L	1.0	1		12/04/17 19:22		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:22		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:22		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-2C-3 **Lab ID: 2066110005** Collected: 11/27/17 12:15 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:22		
Haloether 508	**7.6**	ug/L	1.0	1		12/04/17 19:22		
Haloether 528	ND	ug/L	1.0	1		12/04/17 19:22		
Halomar	ND	ug/L	1.0	1		12/04/17 19:22		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:22	591-78-6	
Isoflurane	**76.6**	ug/L	1.0	1		12/04/17 19:22		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:22	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 19:22	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:22	108-88-3	
Total Haloether	**98.9**	ug/L	1.0	1		12/04/17 19:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 19:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:22	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/04/17 19:22	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 19:22	460-00-4	
Dibromofluoromethane (S)	95	%.	72-126	1		12/04/17 19:22	1868-53-7	

Sample: EB-20171128 **Lab ID: 2066110006** Collected: 11/28/17 07:50 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 19:40	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: EB-20171128 **Lab ID: 2066110006** Collected: 11/28/17 07:50 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 19:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 406	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 508	ND	ug/L	1.0	1		12/04/17 19:40		
Haloether 528	ND	ug/L	1.0	1		12/04/17 19:40		
Halomar	ND	ug/L	1.0	1		12/04/17 19:40		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:40	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 19:40		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:40	75-09-2	~~B,C9~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 19:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:40	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 19:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 19:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/04/17 19:40	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/04/17 19:40	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/04/17 19:40	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171128 **Lab ID: 2066110007** Collected: 11/28/17 09:20 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 19:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 19:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 19:57	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 19:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 19:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 19:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 19:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 19:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 19:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 19:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 19:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 19:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 19:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 19:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 19:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 19:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 19:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 19:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 19:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 19:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 406	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 421	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 427	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 428	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 508	ND	ug/L	1.0	1		12/04/17 19:57		
Haloether 528	ND	ug/L	1.0	1		12/04/17 19:57		
Halomar	ND	ug/L	1.0	1		12/04/17 19:57		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 19:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 19:57		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 19:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 19:57	75-09-2	~~B,C9~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 19:57	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 19:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 19:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 19:57	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 19:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 19:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 19:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 19:57	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171128 **Lab ID: 2066110007** Collected: 11/28/17 09:20 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 19:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 19:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 19:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 19:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 19:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 19:57	95-47-6	
Surrogates								
Toluene-d8 (S)	97	%.	79-119	1		12/04/17 19:57	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/04/17 19:57	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/04/17 19:57	1868-53-7	

Sample: PCMW-2 **Lab ID: 2066110008** Collected: 11/28/17 10:07 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 20:15	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 20:15	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 20:15	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 20:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 20:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 20:15	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 20:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 20:15	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 20:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 20:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 20:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 20:15	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 20:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 20:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 20:15	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 20:15	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:15	75-35-4	
cis-1,2-Dichloroethene	**2.0**	ug/L	1.0	1		12/04/17 20:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 20:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:15	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 20:15	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 20:15	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 406	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 421	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 427	ND	ug/L	1.0	1		12/04/17 20:15		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: PCMW-2 **Lab ID: 2066110008** Collected: 11/28/17 10:07 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 508	ND	ug/L	1.0	1		12/04/17 20:15		
Haloether 528	ND	ug/L	1.0	1		12/04/17 20:15		
Halomar	ND	ug/L	1.0	1		12/04/17 20:15		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 20:15	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 20:15		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 20:15	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 20:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 20:15	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 20:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 20:15	79-34-5	
Tetrachloroethene	**10.5**	ug/L	1.0	1		12/04/17 20:15	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 20:15	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 20:15		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:15	79-00-5	
Trichloroethene	**1.5**	ug/L	1.0	1		12/04/17 20:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 20:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 20:15	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 20:15	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 20:15	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 20:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 20:15	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 20:15	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 20:15	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 20:15	1868-53-7	

Sample: GWDUP001 **Lab ID: 2066110009** Collected: 11/28/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 20:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 20:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 20:33	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 20:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 20:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 20:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 20:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 20:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 20:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 20:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 20:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 20:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 20:33	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: GWDUP001 **Lab ID: 2066110009** Collected: 11/28/17 00:00 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 20:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 20:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 20:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:33	75-35-4	
cis-1,2-Dichloroethene	**1.9**	ug/L	1.0	1		12/04/17 20:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 20:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 20:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 20:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 406	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 421	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 427	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 428	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 508	ND	ug/L	1.0	1		12/04/17 20:33		
Haloether 528	ND	ug/L	1.0	1		12/04/17 20:33		
Halomar	ND	ug/L	1.0	1		12/04/17 20:33		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 20:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 20:33		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 20:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 20:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 20:33	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 20:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 20:33	79-34-5	
Tetrachloroethene	**9.6**	ug/L	1.0	1		12/04/17 20:33	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 20:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 20:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:33	79-00-5	
Trichloroethene	**1.3**	ug/L	1.0	1		12/04/17 20:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 20:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 20:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 20:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 20:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 20:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 20:33	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 20:33	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/04/17 20:33	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 20:33	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-1B-1BR **Lab ID: 2066110010** Collected: 11/28/17 11:02 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 18:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 18:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 18:11	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 18:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 18:11	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 18:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 18:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 18:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 18:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 18:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 18:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 18:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 18:11	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 18:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 18:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 18:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:11	75-35-4	
cis-1,2-Dichloroethene	**3.0**	ug/L	1.0	1		12/04/17 18:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 18:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 18:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 18:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 18:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 18:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 406	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 421	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 427	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 428	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 508	ND	ug/L	1.0	1		12/04/17 18:11		
Haloether 528	ND	ug/L	1.0	1		12/04/17 18:11		
Halomar	ND	ug/L	1.0	1		12/04/17 18:11		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 18:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 18:11		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 18:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 18:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 18:11	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 18:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 18:11	79-34-5	
Tetrachloroethene	**33.7**	ug/L	1.0	1		12/04/17 18:11	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 18:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 18:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 18:11	79-00-5	
Trichloroethene	**2.6**	ug/L	1.0	1		12/04/17 18:11	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-1B-1BR **Lab ID: 2066110010** Collected: 11/28/17 11:02 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	**1.0**	ug/L	1.0	1		12/04/17 18:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 18:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 18:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 18:11	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 18:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 18:11	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/04/17 18:11	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/04/17 18:11	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/04/17 18:11	1868-53-7	

Sample: MW-1B-4 **Lab ID: 2066110011** Collected: 11/28/17 12:06 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 20:51	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 20:51	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 20:51	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 20:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 20:51	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 20:51	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 20:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 20:51	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 20:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 20:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 20:51	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 20:51	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 20:51	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 20:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 20:51	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 20:51	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 20:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 20:51	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 20:51	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 20:51	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 406	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 421	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 427	ND	ug/L	1.0	1		12/04/17 20:51		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: MW-1B-4 **Lab ID: 2066110011** Collected: 11/28/17 12:06 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 508	ND	ug/L	1.0	1		12/04/17 20:51		
Haloether 528	ND	ug/L	1.0	1		12/04/17 20:51		
Halomar	ND	ug/L	1.0	1		12/04/17 20:51		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 20:51	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 20:51		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 20:51	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 20:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 20:51	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 20:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 20:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 20:51	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 20:51	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 20:51		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 20:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 20:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 20:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 20:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 20:51	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 20:51	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 20:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 20:51	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 20:51	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/04/17 20:51	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/04/17 20:51	1868-53-7	

Sample: EB-20171129 **Lab ID: 2066110012** Collected: 11/29/17 08:31 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 21:09	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 21:09	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 21:09	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 21:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 21:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 21:09	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 21:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 21:09	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 21:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 21:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 21:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 21:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 21:09	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: EB-20171129 **Lab ID: 2066110012** Collected: 11/29/17 08:31 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/04/17 21:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 21:09	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 21:09	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 21:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:09	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 21:09	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 21:09	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 406	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 421	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 427	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 428	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 508	ND	ug/L	1.0	1		12/04/17 21:09		
Haloether 528	ND	ug/L	1.0	1		12/04/17 21:09		
Halomar	ND	ug/L	1.0	1		12/04/17 21:09		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 21:09	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 21:09		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 21:09	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 21:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 21:09	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 21:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 21:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 21:09	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 21:09	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 21:09		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 21:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 21:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 21:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 21:09	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 21:09	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 21:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 21:09	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 21:09	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/04/17 21:09	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 21:09	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171129 **Lab ID: 2066110013** Collected: 11/29/17 10:23 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/04/17 21:27	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/04/17 21:27	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/04/17 21:27	107-13-1	
Benzene	ND	ug/L	1.0	1		12/04/17 21:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/04/17 21:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/04/17 21:27	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/04/17 21:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/04/17 21:27	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/04/17 21:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/04/17 21:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/04/17 21:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/04/17 21:27	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/04/17 21:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/04/17 21:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/04/17 21:27	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/04/17 21:27	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/04/17 21:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/04/17 21:27	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/04/17 21:27	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/04/17 21:27	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 406	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 421	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 427	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 428	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 508	ND	ug/L	1.0	1		12/04/17 21:27		
Haloether 528	ND	ug/L	1.0	1		12/04/17 21:27		
Halomar	ND	ug/L	1.0	1		12/04/17 21:27		
2-Hexanone	ND	ug/L	2.0	1		12/04/17 21:27	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/04/17 21:27		
Methoxyflurane	ND	ug/L	1.0	1		12/04/17 21:27	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/04/17 21:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/04/17 21:27	108-10-1	
Styrene	ND	ug/L	1.0	1		12/04/17 21:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/04/17 21:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/04/17 21:27	127-18-4	
Toluene	ND	ug/L	1.0	1		12/04/17 21:27	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/04/17 21:27		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/04/17 21:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/04/17 21:27	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: FB-20171129 **Lab ID: 2066110013** Collected: 11/29/17 10:23 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/04/17 21:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/04/17 21:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/04/17 21:27	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/04/17 21:27	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/04/17 21:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/04/17 21:27	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/04/17 21:27	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/04/17 21:27	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/04/17 21:27	1868-53-7	

Sample: ES-21 **Lab ID: 2066110014** Collected: 11/29/17 12:44 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/05/17 11:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/05/17 11:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/05/17 11:25	107-13-1	
Benzene	ND	ug/L	1.0	1		12/05/17 11:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/05/17 11:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/05/17 11:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/05/17 11:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/05/17 11:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/05/17 11:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/05/17 11:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/05/17 11:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/05/17 11:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/05/17 11:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/05/17 11:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/05/17 11:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/05/17 11:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/05/17 11:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/05/17 11:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/05/17 11:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/05/17 11:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/05/17 11:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 406	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 421	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 427	ND	ug/L	1.0	1		12/05/17 11:25		

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Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066110

Sample: ES-21 **Lab ID: 2066110014** Collected: 11/29/17 12:44 Received: 12/01/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 508	ND	ug/L	1.0	1		12/05/17 11:25		
Haloether 528	ND	ug/L	1.0	1		12/05/17 11:25		
Halomar	ND	ug/L	1.0	1		12/05/17 11:25		
2-Hexanone	ND	ug/L	2.0	1		12/05/17 11:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/05/17 11:25		
Methoxyflurane	ND	ug/L	1.0	1		12/05/17 11:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/05/17 11:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/05/17 11:25	108-10-1	
Styrene	ND	ug/L	1.0	1		12/05/17 11:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/05/17 11:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/05/17 11:25	127-18-4	
Toluene	ND	ug/L	1.0	1		12/05/17 11:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/05/17 11:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/05/17 11:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/05/17 11:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/05/17 11:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/05/17 11:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/05/17 11:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/05/17 11:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/05/17 11:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/05/17 11:25	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/05/17 11:25	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/05/17 11:25	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/05/17 11:25	1868-53-7	

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CHAIN-OF-CUSTODY / Analytical Requ

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fi

WO# : 2066110

2066110

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171127	WT	G			11/27/17	LAB		2				2							X			
2	EB-20171127	WT	G			11/27/17	0935		3				3						X				
3	FB-20171127	WT	G			11/27/17	0957		3				3						X				
4	FMW-2-90	WT	G			11/27/17	1122		3				3						X				
5	MW-2C-3	WT	G			11/27/17	1215		3				3						X				
6	EB-20171128	WT	G			11/28/17	0950		3				3						X				
7	FB-20171128	WT	G			11/28/17	0920		3				3						X				
8	PCMW-2	WT	G			11/28/17	1009		3				3						X				
9	GWDUP001	WT	G			11/28/17	—		3				3						X				
10	MW-1B-1BR	WT	G			11/28/17	1102		3				3						X				
11	MW-1B-1BR (MS)	WT	G			11/28/17	1102		3				3						X				
12	MW-1B-1BR (MSD)	WT	G			11/28/17	1102		3				3						X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	11/28/17	1545	[illegible] / Pace	11-28-17	1545	
	Fedex	11/29/17	0815	Fedex / Pace	11/29/17	0815	4 4 4 4

SAMPLER NAME AND SIGNATURE:
PRINT Name of SAMPLER: Andrés Colon
SIGNATURE of SAMPLER: [signature]
DATE Signed: 11/28/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17(
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	MW-1B-4	WT	G			11/29/17	1206		3				3						X				
2	EB-20171129	WT	G			11/29/17	0831		3				3						X				
3	FB-20171129	WT	G			11/29/17	1023		3				3						X				
4	ES-21	WT	G			11/29/17	1244		3				3						X				
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	11/29/17	1545	[signature] / Pace	11-28-17	1545	
	Fed Ex	11/17	0915	Fed Ex [signature]	11/17	0915	4.4

SAMPLE CONDITIONS			
TEMP in C	4.4		
Received on Ice (Y/N)	Y		
Custody Sealed Cooler (Y/N)	Y		
Samples Intact (Y/N)	Y		

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 11/29/17

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2066562
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29199R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2066562 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
EB-20171130	2066562001	Water	11/30/2017		X				
TB-20171130	2066562002	Water	11/30/2017		X				
FB-20171130	2066562003	Water	11/30/2017		X				
FMW-3-90	2066562004	Water	11/30/2017		X				
MW-4B-3	2066562005	Water	11/30/2017		X				
EB-20171201	2066562006	Water	12/01/2017		X				
FB-20171201	2066562007	Water	12/01/2017		X				
FMW-1-90	2066562008	Water	12/01/2017		X				
FMW-1-20	2066562009	Water	12/01/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location FMW-3-90 for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
FMW-1-20	Acetone (FB)	Detected sample results >RL and <BAL	“UB” at detected sample concentration

RL Reporting limit
FB Field Blank

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location associated with this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: January 29, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: EB-20171130 **Lab ID: 2066562001** Collected: 11/30/17 08:26 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.6**	ug/L	4.0	1		12/11/17 12:31	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 12:31	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 12:31	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 12:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 12:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 12:31	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 12:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 12:31	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 12:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 12:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 12:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 12:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 12:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 12:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 12:31	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 12:31	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 12:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:31	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 12:31	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 12:31	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 406	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 421	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 427	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 428	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 508	ND	ug/L	1.0	1		12/11/17 12:31		
Haloether 528	ND	ug/L	1.0	1		12/11/17 12:31		
Halomar	ND	ug/L	1.0	1		12/11/17 12:31		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 12:31	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 12:31		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 12:31	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 12:31	75-09-2	~~B~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 12:31	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 12:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 12:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 12:31	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 12:31	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 12:31		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 12:31	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: EB-20171130 **Lab ID: 2066562001** Collected: 11/30/17 08:26 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 12:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 12:31	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 12:31	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 12:31	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 12:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 12:31	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/11/17 12:31	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/11/17 12:31	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		12/11/17 12:31	1868-53-7	

Sample: TB-20171130 **Lab ID: 2066562002** Collected: 11/30/17 00:00 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 12:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 12:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 12:48	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 12:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 12:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 12:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 12:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 12:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 12:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 12:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 12:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 12:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 12:48	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 12:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 12:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 12:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 12:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:48	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 12:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 12:48	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 406	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 421	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 427	ND	ug/L	1.0	1		12/11/17 12:48		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: TB-20171130 **Lab ID: 2066562002** Collected: 11/30/17 00:00 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 508	ND	ug/L	1.0	1		12/11/17 12:48		
Haloether 528	ND	ug/L	1.0	1		12/11/17 12:48		
Halomar	ND	ug/L	1.0	1		12/11/17 12:48		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 12:48	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 12:48		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 12:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 12:48	75-09-2	~~B~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 12:48	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 12:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 12:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 12:48	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 12:48	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 12:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 12:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 12:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 12:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 12:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 12:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 12:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 12:48	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/11/17 12:48	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/11/17 12:48	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/11/17 12:48	1868-53-7	

Sample: FB-20171130 **Lab ID: 2066562003** Collected: 11/30/17 09:19 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.4**	ug/L	4.0	1		12/11/17 13:06	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 13:06	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 13:06	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 13:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 13:06	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 13:06	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 13:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 13:06	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 13:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 13:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 13:06	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 13:06	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 13:06	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FB-20171130 **Lab ID: 2066562003** Collected: 11/30/17 09:19 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/11/17 13:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 13:06	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 13:06	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 13:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:06	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 13:06	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 13:06	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 406	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 421	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 427	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 428	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 508	ND	ug/L	1.0	1		12/11/17 13:06		
Haloether 528	ND	ug/L	1.0	1		12/11/17 13:06		
Halomar	ND	ug/L	1.0	1		12/11/17 13:06		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 13:06	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 13:06		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 13:06	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 13:06	75-09-2	~~B~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 13:06	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 13:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 13:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 13:06	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 13:06	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 13:06		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 13:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 13:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 13:06	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 13:06	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 13:06	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 13:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 13:06	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 13:06	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/11/17 13:06	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/11/17 13:06	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-3-90 **Lab ID: 2066562004** Collected: 11/30/17 10:43 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 12:13	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 12:13	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 12:13	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 12:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 12:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 12:13	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 12:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 12:13	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 12:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 12:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 12:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 12:13	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 12:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 12:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 12:13	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 12:13	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 12:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 12:13	10061-02-6	
Enflurane	**2.3**	ug/L	1.0	1		12/11/17 12:13	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 12:13	100-41-4	
Haloether 229	**1.7**	ug/L	1.0	1		12/11/17 12:13		
Haloether 406	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 421	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 427	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 428	ND	ug/L	1.0	1		12/11/17 12:13		
Haloether 508	**40.0**	ug/L	1.0	1		12/11/17 12:13		
Haloether 528	ND	ug/L	1.0	1		12/11/17 12:13		
Halomar	**1.3**	ug/L	1.0	1		12/11/17 12:13		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 12:13	591-78-6	
Isoflurane	**12.7**	ug/L	1.0	1		12/11/17 12:13		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 12:13	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 12:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 12:13	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 12:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 12:13	79-34-5	
Tetrachloroethene	**7.5**	ug/L	1.0	1		12/11/17 12:13	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 12:13	108-88-3	
Total Haloether	**58.1**	ug/L	1.0	1		12/11/17 12:13		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 12:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 12:13	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-3-90 **Lab ID: 2066562004** Collected: 11/30/17 10:43 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 12:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 12:13	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 12:13	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 12:13	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 12:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 12:13	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/11/17 12:13	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/11/17 12:13	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	1		12/11/17 12:13	1868-53-7	

Sample: MW-4B-3 **Lab ID: 2066562005** Collected: 11/30/17 11:58 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 13:24	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 13:24	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 13:24	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 13:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 13:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 13:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 13:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 13:24	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 13:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 13:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 13:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 13:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 13:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 13:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 13:24	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 13:24	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 13:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:24	10061-02-6	
Enflurane	**1.3**	ug/L	1.0	1		12/11/17 13:24	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 13:24	100-41-4	
Haloether 229	**1.0**	ug/L	1.0	1		12/11/17 13:24		
Haloether 406	ND	ug/L	1.0	1		12/11/17 13:24		
Haloether 421	ND	ug/L	1.0	1		12/11/17 13:24		
Haloether 427	ND	ug/L	1.0	1		12/11/17 13:24		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: MW-4B-3 **Lab ID: 2066562005** Collected: 11/30/17 11:58 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/11/17 13:24		
Haloether 508	**28.3**	ug/L	1.0	1		12/11/17 13:24		
Haloether 528	ND	ug/L	1.0	1		12/11/17 13:24		
Halomar	ND	ug/L	1.0	1		12/11/17 13:24		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 13:24	591-78-6	
Isoflurane	**10.6**	ug/L	1.0	1		12/11/17 13:24		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 13:24	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 13:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 13:24	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 13:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 13:24	79-34-5	
Tetrachloroethene	**2.7**	ug/L	1.0	1		12/11/17 13:24	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 13:24	108-88-3	
Total Haloether	**41.3**	ug/L	1.0	1		12/11/17 13:24		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 13:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 13:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 13:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 13:24	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 13:24	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 13:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 13:24	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 13:24	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		12/11/17 13:24	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		12/11/17 13:24	1868-53-7	

Sample: EB-20171201 **Lab ID: 2066562006** Collected: 12/01/17 08:45 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 13:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 13:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 13:42	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 13:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 13:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 13:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 13:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 13:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 13:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 13:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 13:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 13:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 13:42	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: EB-20171201 **Lab ID: 2066562006** Collected: 12/01/17 08:45 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/11/17 13:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 13:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 13:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 13:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 13:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 13:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 13:42	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 406	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 421	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 427	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 428	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 508	ND	ug/L	1.0	1		12/11/17 13:42		
Haloether 528	ND	ug/L	1.0	1		12/11/17 13:42		
Halomar	ND	ug/L	1.0	1		12/11/17 13:42		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 13:42	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 13:42		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 13:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 13:42	75-09-2	~~B~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 13:42	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 13:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 13:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 13:42	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 13:42	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 13:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 13:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 13:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 13:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 13:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 13:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 13:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 13:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 13:42	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 13:42	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/11/17 13:42	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	1		12/11/17 13:42	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FB-20171201 **Lab ID: 2066562007** Collected: 12/01/17 09:30 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.8**	ug/L	4.0	1		12/11/17 14:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 14:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 14:00	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 14:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 14:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 14:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 14:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 14:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 14:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 14:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 14:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 14:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 14:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 14:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 406	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 421	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 427	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 428	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 508	ND	ug/L	1.0	1		12/11/17 14:00		
Haloether 528	ND	ug/L	1.0	1		12/11/17 14:00		
Halomar	ND	ug/L	1.0	1		12/11/17 14:00		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 14:00	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/11/17 14:00		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 14:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 14:00	75-09-2	~~B~~
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 14:00	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 14:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 14:00	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 14:00	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/11/17 14:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 14:00	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FB-20171201 **Lab ID: 2066562007** Collected: 12/01/17 09:30 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 14:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 14:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 14:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 14:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 14:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 14:00	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/11/17 14:00	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/11/17 14:00	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		12/11/17 14:00	1868-53-7	

Sample: FMW-1-90 **Lab ID: 2066562008** Collected: 12/01/17 11:15 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/11/17 14:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/11/17 14:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 14:18	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 14:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 14:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 14:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 14:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 14:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 14:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 14:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 14:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 14:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/11/17 14:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 14:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 14:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 14:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:18	10061-02-6	
Enflurane	**1.3**	ug/L	1.0	1		12/11/17 14:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 14:18	100-41-4	
Haloether 229	**2.0**	ug/L	1.0	1		12/11/17 14:18		
Haloether 406	ND	ug/L	1.0	1		12/11/17 14:18		
Haloether 421	ND	ug/L	1.0	1		12/11/17 14:18		
Haloether 427	ND	ug/L	1.0	1		12/11/17 14:18		

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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-1-90 **Lab ID: 2066562008** Collected: 12/01/17 11:15 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/11/17 14:18		
Haloether 508	**3.9**	ug/L	1.0	1		12/11/17 14:18		
Haloether 528	ND	ug/L	1.0	1		12/11/17 14:18		
Halomar	ND	ug/L	1.0	1		12/11/17 14:18		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 14:18	591-78-6	
Isoflurane	**7.3**	ug/L	1.0	1		12/11/17 14:18		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 14:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 14:18	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 14:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 14:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 14:18	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 14:18	108-88-3	
Total Haloether	**14.5**	ug/L	1.0	1		12/11/17 14:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 14:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 14:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 14:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 14:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 14:18	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/11/17 14:18	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/11/17 14:18	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/11/17 14:18	1868-53-7	

Sample: FMW-1-20 **Lab ID: 2066562009** Collected: 12/01/17 12:25 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.1**	ug/L	4.0	1		12/11/17 14:35	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/11/17 14:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/11/17 14:35	107-13-1	
Benzene	ND	ug/L	1.0	1		12/11/17 14:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/11/17 14:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/11/17 14:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/11/17 14:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/11/17 14:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/11/17 14:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/11/17 14:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/11/17 14:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/11/17 14:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/11/17 14:35	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066562

Sample: FMW-1-20 **Lab ID: 2066562009** Collected: 12/01/17 12:25 Received: 12/05/17 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/11/17 14:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/11/17 14:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/11/17 14:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/11/17 14:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/11/17 14:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/11/17 14:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/11/17 14:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 406	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 421	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 427	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 428	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 508	ND	ug/L	1.0	1		12/11/17 14:35		
Haloether 528	ND	ug/L	1.0	1		12/11/17 14:35		
Halomar	ND	ug/L	1.0	1		12/11/17 14:35		
2-Hexanone	ND	ug/L	2.0	1		12/11/17 14:35	591-78-6	
Isoflurane	**2.8**	ug/L	1.0	1		12/11/17 14:35		
Methoxyflurane	ND	ug/L	1.0	1		12/11/17 14:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/11/17 14:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/11/17 14:35	108-10-1	
Styrene	ND	ug/L	1.0	1		12/11/17 14:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/11/17 14:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/11/17 14:35	127-18-4	
Toluene	ND	ug/L	1.0	1		12/11/17 14:35	108-88-3	
Total Haloether	**2.8**	ug/L	1.0	1		12/11/17 14:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/11/17 14:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/11/17 14:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/11/17 14:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/11/17 14:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/11/17 14:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/11/17 14:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/11/17 14:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/11/17 14:35	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/11/17 14:35	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/11/17 14:35	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		12/11/17 14:35	1868-53-7	

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CHAIN-OF-CUSTODY / Analytical Requ

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant

WO# : 2066562

2066562

1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test (Y/N): VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	EB-20171130	WT	G			11/30/17	0826		3				3					X				
2	TB-20171130	WT	G			11/30/17	LAB		2				2						X			
3	FB-20171130	WT	G			11/30/17	0919		3				3					X				
4	FMW-3-90	WT	G			11/30/17	1043		3				3					X				
5	MW-4B-3	WT	G			11/30/17	1158		3				3					X				
6	EB-20171201	WT	G			12/01/17	0845		3				3					X				
7	FB-20171201	WT	G			12/01/17	0930		3				3					X				
8	FMW-1-90	WT	G			12/01/17	1115		3				3					X				
9	FMW-1-20	WT	G			12/01/17	1225		3				3					X				
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andi Colon / Arcadis	12/1/17	1458	[signature] - Pace	12/1/17	1458	4°	Y	N	Y
				Fed Ex						
	Fed Ex	12/5/17	1115	[signature] - Pace	12/5/17	1115	3.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andi Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/1/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2066833
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29200R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2066833 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171207	2066833001	Water	12/07/2017		X				
EB-20171207	2066833002	Water	12/07/2017		X				
FB-20171207	2066833003	Water	12/07/2017		X				
MW-1D-1BR	2066833004	Water	12/07/2017		X				
MW-1D-4	2066833005	Water	12/07/2017		X				
MW-1D-2	2066833006	Water	12/07/2017		X				
EB-20171208	2066833007	Water	12/08/2017		X				
FB-20171208	2066833008	Water	12/08/2017		X				
MW-1A-3	2066833009	Water	12/08/2017		X				
MW-1A-1BR	2066833010	Water	12/08/2017		X				
MW-1A-4	2066833011	Water	12/08/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-1D-1BR for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-1D-1BR MW-1D-4 MW-1D-2	Acetone (TB)	Detected sample results >RL and <BAL	“UB” at detected sample concentration

RL Reporting limit
TB Trip Blank

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location associated with this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X	X		
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: January 29, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: TB-20171207 **Lab ID: 2066833001** Collected: 12/07/17 00:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.5**	ug/L	4.0	1		12/15/17 12:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 12:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 12:07	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 12:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 12:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 12:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 12:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 12:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 12:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 12:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 12:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 12:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 12:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 12:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 12:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 12:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 12:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 12:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 12:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 406	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 421	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 427	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 428	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 508	ND	ug/L	1.0	1		12/15/17 12:07		
Haloether 528	ND	ug/L	1.0	1		12/15/17 12:07		
Halomar	ND	ug/L	1.0	1		12/15/17 12:07		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 12:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 12:07		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 12:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 12:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 12:07	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 12:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 12:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 12:07	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 12:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 12:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 12:07	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: TB-20171207 **Lab ID: 2066833001** Collected: 12/07/17 00:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 12:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 12:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 12:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 12:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 12:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 12:07	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 12:07	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/15/17 12:07	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/15/17 12:07	1868-53-7	

Sample: EB-20171207 **Lab ID: 2066833002** Collected: 12/07/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/15/17 12:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 12:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 12:25	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 12:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 12:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 12:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 12:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 12:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 12:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 12:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 12:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 12:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 12:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 12:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 12:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 12:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 12:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 12:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 12:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 406	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 421	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 427	ND	ug/L	1.0	1		12/15/17 12:25		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: EB-20171207 **Lab ID: 2066833002** Collected: 12/07/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 508	ND	ug/L	1.0	1		12/15/17 12:25		
Haloether 528	ND	ug/L	1.0	1		12/15/17 12:25		
Halomar	ND	ug/L	1.0	1		12/15/17 12:25		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 12:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 12:25		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 12:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 12:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 12:25	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 12:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 12:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 12:25	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 12:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 12:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 12:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 12:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 12:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 12:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 12:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 12:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 12:25	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 12:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/15/17 12:25	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/15/17 12:25	1868-53-7	

Sample: FB-20171207 **Lab ID: 2066833003** Collected: 12/07/17 09:10 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.2**	ug/L	4.0	1		12/15/17 12:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 12:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 12:43	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 12:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 12:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 12:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 12:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 12:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 12:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 12:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 12:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 12:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 12:43	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: FB-20171207 **Lab ID: 2066833003** Collected: 12/07/17 09:10 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/15/17 12:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 12:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 12:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 12:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 12:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 12:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 12:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 406	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 421	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 427	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 428	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 508	ND	ug/L	1.0	1		12/15/17 12:43		
Haloether 528	ND	ug/L	1.0	1		12/15/17 12:43		
Halomar	ND	ug/L	1.0	1		12/15/17 12:43		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 12:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 12:43		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 12:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 12:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 12:43	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 12:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 12:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 12:43	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 12:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 12:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 12:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 12:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 12:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 12:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 12:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 12:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 12:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 12:43	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/15/17 12:43	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/15/17 12:43	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/15/17 12:43	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-1BR **Lab ID: 2066833004** Collected: 12/07/17 10:33 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.2**	ug/L	4.0	1		12/15/17 11:50	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/15/17 11:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 11:50	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 11:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 11:50	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 11:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 11:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 11:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 11:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 11:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 11:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 11:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 11:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 11:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 11:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 11:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 11:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 11:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 11:50	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 11:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 11:50	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 406	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 421	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 427	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 428	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 508	ND	ug/L	1.0	1		12/15/17 11:50		
Haloether 528	ND	ug/L	1.0	1		12/15/17 11:50		
Halomar	ND	ug/L	1.0	1		12/15/17 11:50		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 11:50	591-78-6	
Isoflurane	**10.3**	ug/L	1.0	1		12/15/17 11:50		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 11:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 11:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 11:50	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 11:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 11:50	79-34-5	
Tetrachloroethene	**4.2**	ug/L	1.0	1		12/15/17 11:50	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 11:50	108-88-3	
Total Haloether	**10.3**	ug/L	1.0	1		12/15/17 11:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 11:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 11:50	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-1BR **Lab ID: 2066833004** Collected: 12/07/17 10:33 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 11:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 11:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 11:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 11:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 11:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 11:50	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/15/17 11:50	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/15/17 11:50	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		12/15/17 11:50	1868-53-7	

Sample: MW-1D-4 **Lab ID: 2066833005** Collected: 12/07/17 11:35 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.2**	ug/L	4.0	1		12/15/17 13:00	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/15/17 13:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:00	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 13:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:00		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-4 **Lab ID: 2066833005** Collected: 12/07/17 11:35 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:00		
Haloether 508	**4.1**	ug/L	1.0	1		12/15/17 13:00		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:00		
Halomar	ND	ug/L	1.0	1		12/15/17 13:00		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:00	591-78-6	
Isoflurane	**3.6**	ug/L	1.0	1		12/15/17 13:00		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:00	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 13:00	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:00	108-88-3	
Total Haloether	**7.7**	ug/L	1.0	1		12/15/17 13:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:00	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 13:00	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/15/17 13:00	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		12/15/17 13:00	1868-53-7	

Sample: MW-1D-2 **Lab ID: 2066833006** Collected: 12/07/17 12:15 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.9**	ug/L	4.0	1		12/15/17 13:18	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/15/17 13:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:18	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:18	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1D-2 **Lab ID: 2066833006** Collected: 12/07/17 12:15 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:18	10061-02-6	
Enflurane	**2.6**	ug/L	1.0	1		12/15/17 13:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:18	100-41-4	
Haloether 229	**1.3**	ug/L	1.0	1		12/15/17 13:18		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 508	ND	ug/L	1.0	1		12/15/17 13:18		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:18		
Halomar	**7.1**	ug/L	1.0	1		12/15/17 13:18		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:18	591-78-6	
Isoflurane	**9.1**	ug/L	1.0	1		12/15/17 13:18		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:18	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:18	79-34-5	
Tetrachloroethene	**4.3**	ug/L	1.0	1		12/15/17 13:18	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:18	108-88-3	
Total Haloether	**20.1**	ug/L	1.0	1		12/15/17 13:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:18	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 13:18	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/15/17 13:18	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		12/15/17 13:18	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: EB-20171208 **Lab ID: 2066833007** Collected: 12/08/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/15/17 13:36	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 13:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:36	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 13:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 508	ND	ug/L	1.0	1		12/15/17 13:36		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:36		
Halomar	ND	ug/L	1.0	1		12/15/17 13:36		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:36	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 13:36		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:36	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 13:36	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:36	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 13:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:36	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: EB-20171208 **Lab ID: 2066833007** Collected: 12/08/17 08:02 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:36	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:36	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 13:36	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		12/15/17 13:36	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		12/15/17 13:36	1868-53-7	

Sample: FB-20171208 **Lab ID: 2066833008** Collected: 12/08/17 08:55 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/15/17 13:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 13:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 13:54	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 13:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 13:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 13:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 13:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 13:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 13:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 13:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 13:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 13:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 13:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 13:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 13:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 13:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 13:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 13:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 13:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 13:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 406	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 421	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 427	ND	ug/L	1.0	1		12/15/17 13:54		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: FB-20171208 **Lab ID: 2066833008** Collected: 12/08/17 08:55 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 508	ND	ug/L	1.0	1		12/15/17 13:54		
Haloether 528	ND	ug/L	1.0	1		12/15/17 13:54		
Halomar	ND	ug/L	1.0	1		12/15/17 13:54		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 13:54	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 13:54		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 13:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 13:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 13:54	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 13:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 13:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 13:54	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 13:54	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 13:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 13:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 13:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 13:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 13:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 13:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 13:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 13:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 13:54	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/15/17 13:54	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/15/17 13:54	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/15/17 13:54	1868-53-7	

Sample: MW-1A-3 **Lab ID: 2066833009** Collected: 12/08/17 10:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.8**	ug/L	4.0	1		12/15/17 14:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 14:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 14:12	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 14:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 14:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 14:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 14:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 14:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 14:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 14:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 14:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 14:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 14:12	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-3 **Lab ID: 2066833009** Collected: 12/08/17 10:00 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/15/17 14:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 14:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 14:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 14:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 14:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 14:12	100-41-4	
Haloether 229	**5.1**	ug/L	1.0	1		12/15/17 14:12		
Haloether 406	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 421	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 427	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 428	ND	ug/L	1.0	1		12/15/17 14:12		
Haloether 508	**30.6**	ug/L	1.0	1		12/15/17 14:12		
Haloether 528	ND	ug/L	1.0	1		12/15/17 14:12		
Halomar	ND	ug/L	1.0	1		12/15/17 14:12		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 14:12	591-78-6	
Isoflurane	**23.3**	ug/L	1.0	1		12/15/17 14:12		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 14:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 14:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 14:12	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 14:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 14:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 14:12	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 14:12	108-88-3	
Total Haloether	**59.0**	ug/L	1.0	1		12/15/17 14:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 14:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 14:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 14:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 14:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 14:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 14:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 14:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 14:12	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		12/15/17 14:12	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		12/15/17 14:12	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-1BR **Lab ID: 2066833010** Collected: 12/08/17 11:18 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.6**	ug/L	4.0	1		12/15/17 14:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 14:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 14:29	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 14:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 14:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 14:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 14:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 14:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 14:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 14:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 14:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 14:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 14:29	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 14:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 14:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 14:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 14:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:29	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 14:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 14:29	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 406	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 421	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 427	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 428	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 508	ND	ug/L	1.0	1		12/15/17 14:29		
Haloether 528	ND	ug/L	1.0	1		12/15/17 14:29		
Halomar	ND	ug/L	1.0	1		12/15/17 14:29		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 14:29	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/15/17 14:29		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 14:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 14:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 14:29	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 14:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 14:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 14:29	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 14:29	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/15/17 14:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 14:29	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-1BR **Lab ID: 2066833010** Collected: 12/08/17 11:18 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 14:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 14:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 14:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 14:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 14:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 14:29	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/15/17 14:29	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/15/17 14:29	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		12/15/17 14:29	1868-53-7	

Sample: MW-1A-4 **Lab ID: 2066833011** Collected: 12/08/17 11:59 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.0**	ug/L	4.0	1		12/15/17 14:47	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/15/17 14:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/15/17 14:47	107-13-1	
Benzene	ND	ug/L	1.0	1		12/15/17 14:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/15/17 14:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/15/17 14:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/15/17 14:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/15/17 14:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/15/17 14:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/15/17 14:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/15/17 14:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/15/17 14:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/15/17 14:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/15/17 14:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/15/17 14:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/15/17 14:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/15/17 14:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/15/17 14:47	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/15/17 14:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/15/17 14:47	100-41-4	
Haloether 229	**8.0**	ug/L	1.0	1		12/15/17 14:47		
Haloether 406	ND	ug/L	1.0	1		12/15/17 14:47		
Haloether 421	ND	ug/L	1.0	1		12/15/17 14:47		
Haloether 427	ND	ug/L	1.0	1		12/15/17 14:47		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066833

Sample: MW-1A-4 **Lab ID: 2066833011** Collected: 12/08/17 11:59 Received: 12/12/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/15/17 14:47		
Haloether 508	**36.7**	ug/L	1.0	1		12/15/17 14:47		
Haloether 528	**1.1**	ug/L	1.0	1		12/15/17 14:47		
Halomar	ND	ug/L	1.0	1		12/15/17 14:47		
2-Hexanone	ND	ug/L	2.0	1		12/15/17 14:47	591-78-6	
Isoflurane	**38.7**	ug/L	1.0	1		12/15/17 14:47		
Methoxyflurane	ND	ug/L	1.0	1		12/15/17 14:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/15/17 14:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/15/17 14:47	108-10-1	
Styrene	ND	ug/L	1.0	1		12/15/17 14:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/15/17 14:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/15/17 14:47	127-18-4	
Toluene	ND	ug/L	1.0	1		12/15/17 14:47	108-88-3	
Total Haloether	**84.5**	ug/L	1.0	1		12/15/17 14:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/15/17 14:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/15/17 14:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/15/17 14:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/15/17 14:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/15/17 14:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/15/17 14:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/15/17 14:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/15/17 14:47	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/15/17 14:47	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/15/17 14:47	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		12/15/17 14:47	1868-53-7	

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Requ

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fi

WO# : 2066833

2066833

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171207	WT	G			12/07/17	LAB		2				2						X			
2	EB-20171207	WT	G			12/07/17	0802		3				3					X				
3	FB-20171207	WT	G			12/07/17	0910		3				3					X				
4	MW-1D-1BR	WT	G			12/07/17	1033		3				3					X				
5	MW-1D-4	WT	G			12/07/17	1135		3				3					X				
6	MW-1D-2	WT	G			12/07/17	1215		3				3					X				
7	EB-20171208	WT	G			12/08/17	0802		3				3					X				
8	FB-20171208	WT	G			12/08/17	0855		3				3					X				
9	MW-1A-3	WT	G			12/08/17	1000		3				3					X				
10	MW-1A-1BR	WT	G			12/08/17	1118		3				3					X				
11	MW-1A-4	WT	G			12/08/17	1159		3				3					X				
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrew Lidom Arcadis	12/8/17	1448	[illegible]	12/8/17	1448	4°C	Y	N	Y
	Fed Ex 12/12/17		0950	Fed Ex [illegible] 12/12/17		0950	0.1	Y	Y	Y

TEMP in C	
Received on Ice (Y/N)	
Custody Sealed Cooler (Y/N)	
Samples Intact (Y/N)	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew Lidom

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/8/17

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2066645
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29208R
Review Level: Tier III
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 2066645 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171204	2066645001	Water	12/04/2017		X				
EB-20171204	2066645002	Water	12/04/2017		X				
FB-20171204	2066645003	Water	12/04/2017		X				
MW-1A-3-BP	2066645004	Water	12/04/2017		X				
MW-1D-3-BP	2066645005	Water	12/04/2017		X				
EB-20171205	2066645006	Water	12/05/2017		X				
FB-20171205	2066645007	Water	12/05/2017		X				
MW-4B-2	2066645008	Water	12/05/2017		X				
MW-4B-4	2066645009	Water	12/05/2017		X				
MW-1	2066645010	Water	12/05/2017		X				
MW-3A-4	2066645011	Water	12/05/2017		X				
EB-20171206	2066645012	Water	12/06/2017		X				
MW-1D-3	2066645013	Water	12/06/2017		X				
FB-20171206	2066645014	Water	12/06/2017		X				
MW-9-90	2066645015	Water	12/06/2017		X				

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method, field and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-4B-4 MW-1 MW-3A-4	Acetone (FB)	Detected sample results >RL and <BAL	"UB" at detected sample concentration
MW-1D-3	Acetone (EB)		

RL Reporting limit
EB Equipment Blank
FB Field Blank

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on a sample location within this SDG.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate (LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)					X
Matrix Spike Duplicate (MSD)					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (%D)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Percent relative difference
%R Percent recovery
RPD Relative percent difference
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: Joseph C. Houser

DATE: January 31, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: TB-20171204 **Lab ID: 2066645001** Collected: 12/04/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 12:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 12:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 12:54	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 12:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 12:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 12:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 12:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 12:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 12:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 12:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 12:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 12:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 12:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 12:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 12:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 12:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 12:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 12:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 12:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 12:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 406	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 421	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 427	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 428	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 508	ND	ug/L	1.0	1		12/12/17 12:54		
Haloether 528	ND	ug/L	1.0	1		12/12/17 12:54		
Halomar	ND	ug/L	1.0	1		12/12/17 12:54		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 12:54	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 12:54		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 12:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 12:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 12:54	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 12:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 12:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 12:54	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 12:54	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 12:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 12:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 12:54	79-01-6	

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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: TB-20171204 **Lab ID: 2066645001** Collected: 12/04/17 00:00 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 12:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 12:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 12:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 12:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 12:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 12:54	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/12/17 12:54	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 12:54	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		12/12/17 12:54	1868-53-7	

Sample: EB-20171204 **Lab ID: 2066645002** Collected: 12/04/17 08:05 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.0**	ug/L	4.0	1		12/12/17 13:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 13:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 13:11	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 13:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 13:11	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 13:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 13:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 13:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 13:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 13:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 13:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 13:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 13:11	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 13:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 13:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 13:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 13:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 13:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 13:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 406	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 421	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 427	ND	ug/L	1.0	1		12/12/17 13:11		

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(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: EB-20171204 **Lab ID: 2066645002** Collected: 12/04/17 08:05 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 508	ND	ug/L	1.0	1		12/12/17 13:11		
Haloether 528	ND	ug/L	1.0	1		12/12/17 13:11		
Halomar	ND	ug/L	1.0	1		12/12/17 13:11		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 13:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 13:11		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 13:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 13:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 13:11	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 13:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 13:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 13:11	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 13:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 13:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 13:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 13:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 13:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 13:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 13:11	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 13:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 13:11	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/12/17 13:11	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/12/17 13:11	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 13:11	1868-53-7	

Sample: FB-20171204 **Lab ID: 2066645003** Collected: 12/04/17 10:08 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.5**	ug/L	4.0	1		12/12/17 13:29	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 13:29	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 13:29	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 13:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 13:29	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 13:29	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 13:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 13:29	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 13:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 13:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 13:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 13:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 13:29	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171204 **Lab ID: 2066645003** Collected: 12/04/17 10:08 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 13:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 13:29	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 13:29	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 13:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:29	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 13:29	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 13:29	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 406	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 421	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 427	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 428	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 508	ND	ug/L	1.0	1		12/12/17 13:29		
Haloether 528	ND	ug/L	1.0	1		12/12/17 13:29		
Halomar	ND	ug/L	1.0	1		12/12/17 13:29		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 13:29	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 13:29		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 13:29	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 13:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 13:29	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 13:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 13:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 13:29	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 13:29	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 13:29		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 13:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 13:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 13:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 13:29	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 13:29	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 13:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 13:29	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 13:29	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/12/17 13:29	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 13:29	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1A-3-BP **Lab ID: 2066645004** Collected: 12/04/17 11:10 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 13:47	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 13:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 13:47	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 13:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 13:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 13:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 13:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 13:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 13:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 13:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 13:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 13:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 13:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 13:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 13:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 13:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 13:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 13:47	10061-02-6	
Enflurane	**1.9**	ug/L	1.0	1		12/12/17 13:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 13:47	100-41-4	
Haloether 229	**4.3**	ug/L	1.0	1		12/12/17 13:47		
Haloether 406	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 421	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 427	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 428	ND	ug/L	1.0	1		12/12/17 13:47		
Haloether 508	**54.7**	ug/L	1.0	1		12/12/17 13:47		
Haloether 528	**1.3**	ug/L	1.0	1		12/12/17 13:47		
Halomar	**1.0**	ug/L	1.0	1		12/12/17 13:47		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 13:47	591-78-6	
Isoflurane	**19.3**	ug/L	1.0	1		12/12/17 13:47		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 13:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 13:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 13:47	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 13:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 13:47	79-34-5	
Tetrachloroethene	**1.8**	ug/L	1.0	1		12/12/17 13:47	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 13:47	108-88-3	
Total Haloether	**82.5**	ug/L	1.0	1		12/12/17 13:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 13:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 13:47	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1A-3-BP **Lab ID: 2066645004** Collected: 12/04/17 11:10 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 13:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 13:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 13:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 13:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 13:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 13:47	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 13:47	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/12/17 13:47	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 13:47	1868-53-7	

Sample: MW-1D-3-BP **Lab ID: 2066645005** Collected: 12/04/17 13:29 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 14:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:05	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 14:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 14:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 406	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:05		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1D-3-BP **Lab ID: 2066645005** Collected: 12/04/17 13:29 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:05		
Haloether 508	**127**	ug/L	1.0	1		12/12/17 14:05		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:05		
Halomar	ND	ug/L	1.0	1		12/12/17 14:05		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:05	591-78-6	
Isoflurane	**7.2**	ug/L	1.0	1		12/12/17 14:05		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 14:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:05	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:05	79-34-5	
Tetrachloroethene	**4.5**	ug/L	1.0	1		12/12/17 14:05	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:05	108-88-3	
Total Haloether	**134**	ug/L	1.0	1		12/12/17 14:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 14:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:05	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 14:05	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 14:05	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 14:05	1868-53-7	

Sample: EB-20171205 **Lab ID: 2066645006** Collected: 12/05/17 08:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 14:23	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:23	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:23	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:23	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:23	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:23	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:23	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:23	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 14:23	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: EB-20171205 **Lab ID: 2066645006** Collected: 12/05/17 08:58 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:23	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:23	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:23	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 14:23	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:23	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 406	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 508	ND	ug/L	1.0	1		12/12/17 14:23		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:23		
Halomar	ND	ug/L	1.0	1		12/12/17 14:23		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:23	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 14:23		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 14:23	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:23	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 14:23	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:23	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 14:23		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:23	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 14:23	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:23	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:23	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:23	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 14:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/12/17 14:23	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 14:23	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171205 **Lab ID: 2066645007** Collected: 12/05/17 09:54 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.1**	ug/L	4.0	1		12/12/17 14:41	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:41	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:41	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:41	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:41	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:41	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:41	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 14:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:41	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:41	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:41	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 14:41	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:41	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 406	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 508	ND	ug/L	1.0	1		12/12/17 14:41		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:41		
Halomar	ND	ug/L	1.0	1		12/12/17 14:41		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:41	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 14:41		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 14:41	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:41	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 14:41	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:41	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 14:41		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:41	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171205 **Lab ID: 2066645007** Collected: 12/05/17 09:54 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:41	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 14:41	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:41	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:41	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 14:41	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 14:41	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 14:41	1868-53-7	

Sample: MW-4B-2 **Lab ID: 2066645008** Collected: 12/05/17 10:45 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 14:58	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 14:58	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 14:58	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 14:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 14:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 14:58	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 14:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 14:58	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 14:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 14:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 14:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 14:58	75-00-3	
Chloroform	**1.2**	ug/L	1.0	1		12/12/17 14:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 14:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 14:58	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 14:58	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 14:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 14:58	10061-02-6	
Enflurane	**5.8**	ug/L	1.0	1		12/12/17 14:58	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 14:58	100-41-4	
Haloether 229	**7.6**	ug/L	1.0	1		12/12/17 14:58		
Haloether 406	**1.3**	ug/L	1.0	1		12/12/17 14:58		
Haloether 421	ND	ug/L	1.0	1		12/12/17 14:58		
Haloether 427	ND	ug/L	1.0	1		12/12/17 14:58		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-4B-2 **Lab ID: 2066645008** Collected: 12/05/17 10:45 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 14:58		
Haloether 508	**28.1**	ug/L	1.0	1		12/12/17 14:58		
Haloether 528	ND	ug/L	1.0	1		12/12/17 14:58		
Halomar	**6.0**	ug/L	1.0	1		12/12/17 14:58		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 14:58	591-78-6	
Isoflurane	**155**	ug/L	1.0	1		12/12/17 14:58		
Methoxyflurane	**1.7**	ug/L	1.0	1		12/12/17 14:58	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 14:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 14:58	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 14:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 14:58	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	1		12/12/17 14:58	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 14:58	108-88-3	
Total Haloether	**205**	ug/L	1.0	1		12/12/17 14:58		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 14:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 14:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 14:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 14:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	**1.6**	ug/L	1.0	1		12/12/17 14:58	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 14:58	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 14:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 14:58	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/12/17 14:58	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/12/17 14:58	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/12/17 14:58	1868-53-7	

Sample: MW-4B-4 **Lab ID: 2066645009** Collected: 12/05/17 11:35 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.6**	ug/L	4.0	1		12/12/17 15:16	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/12/17 15:16	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 15:16	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 15:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 15:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 15:16	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 15:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 15:16	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 15:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 15:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 15:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 15:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 15:16	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-4B-4 **Lab ID: 2066645009** Collected: 12/05/17 11:35 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 15:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 15:16	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 15:16	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 15:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:16	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 15:16	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 15:16	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 406	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 421	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 427	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 428	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 508	ND	ug/L	1.0	1		12/12/17 15:16		
Haloether 528	ND	ug/L	1.0	1		12/12/17 15:16		
Halomar	ND	ug/L	1.0	1		12/12/17 15:16		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 15:16	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 15:16		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 15:16	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 15:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 15:16	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 15:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 15:16	79-34-5	
Tetrachloroethene	**1.4**	ug/L	1.0	1		12/12/17 15:16	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 15:16	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 15:16		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 15:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 15:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 15:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 15:16	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 15:16	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 15:16	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 15:16	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 15:16	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 15:16	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/12/17 15:16	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1 **Lab ID: 2066645010** Collected: 12/05/17 12:40 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.4**	ug/L	4.0	1		12/12/17 15:34	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/12/17 15:34	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 15:34	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 15:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 15:34	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 15:34	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 15:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 15:34	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 15:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 15:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 15:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 15:34	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 15:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 15:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 15:34	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 15:34	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 15:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:34	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 15:34	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 15:34	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 406	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 421	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 427	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 428	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 508	ND	ug/L	1.0	1		12/12/17 15:34		
Haloether 528	ND	ug/L	1.0	1		12/12/17 15:34		
Halomar	ND	ug/L	1.0	1		12/12/17 15:34		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 15:34	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 15:34		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 15:34	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 15:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 15:34	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 15:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 15:34	79-34-5	
Tetrachloroethene	**2.2**	ug/L	1.0	1		12/12/17 15:34	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 15:34	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 15:34		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 15:34	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1 **Lab ID: 2066645010** Collected: 12/05/17 12:40 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 15:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 15:34	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 15:34	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 15:34	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 15:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 15:34	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 15:34	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 15:34	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/12/17 15:34	1868-53-7	

Sample: MW-3A-4 **Lab ID: 2066645011** Collected: 12/05/17 13:31 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.9**	ug/L	4.0	1		12/12/17 15:52	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/12/17 15:52	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 15:52	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 15:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 15:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 15:52	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 15:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 15:52	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 15:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 15:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 15:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 15:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 15:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 15:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 15:52	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 15:52	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 15:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 15:52	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 15:52	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 15:52	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 406	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 421	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 427	ND	ug/L	1.0	1		12/12/17 15:52		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-3A-4 **Lab ID: 2066645011** Collected: 12/05/17 13:31 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 508	ND	ug/L	1.0	1		12/12/17 15:52		
Haloether 528	ND	ug/L	1.0	1		12/12/17 15:52		
Halomar	ND	ug/L	1.0	1		12/12/17 15:52		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 15:52	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 15:52		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 15:52	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 15:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 15:52	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 15:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 15:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 15:52	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 15:52	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 15:52		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 15:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 15:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 15:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 15:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 15:52	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 15:52	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 15:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 15:52	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 15:52	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/12/17 15:52	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 15:52	1868-53-7	

Sample: EB-20171206 **Lab ID: 2066645012** Collected: 12/06/17 08:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.3**	ug/L	4.0	1		12/12/17 16:09	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 16:09	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 16:09	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 16:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 16:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 16:09	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 16:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 16:09	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 16:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 16:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 16:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 16:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 16:09	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: EB-20171206 **Lab ID: 2066645012** Collected: 12/06/17 08:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 16:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 16:09	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 16:09	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 16:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:09	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 16:09	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 16:09	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 406	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 421	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 427	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 428	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 508	ND	ug/L	1.0	1		12/12/17 16:09		
Haloether 528	ND	ug/L	1.0	1		12/12/17 16:09		
Halomar	ND	ug/L	1.0	1		12/12/17 16:09		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 16:09	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 16:09		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 16:09	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 16:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 16:09	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 16:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 16:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 16:09	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 16:09	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 16:09		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 16:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 16:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 16:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 16:09	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 16:09	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 16:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 16:09	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 16:09	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 16:09	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 16:09	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1D-3 **Lab ID: 2066645013** Collected: 12/06/17 11:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.9**	ug/L	4.0	1		12/12/17 16:27	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/12/17 16:27	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 16:27	107-13-1	
Benzene	**1.2**	ug/L	1.0	1		12/12/17 16:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 16:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 16:27	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 16:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 16:27	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 16:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 16:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 16:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 16:27	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 16:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 16:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 16:27	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 16:27	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 16:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:27	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 16:27	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 16:27	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 406	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 421	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 427	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 428	ND	ug/L	1.0	1		12/12/17 16:27		
Haloether 508	**25.6**	ug/L	1.0	1		12/12/17 16:27		
Haloether 528	ND	ug/L	1.0	1		12/12/17 16:27		
Halomar	ND	ug/L	1.0	1		12/12/17 16:27		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 16:27	591-78-6	
Isoflurane	**29.7**	ug/L	1.0	1		12/12/17 16:27		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 16:27	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 16:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 16:27	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 16:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 16:27	79-34-5	
Tetrachloroethene	**3.7**	ug/L	1.0	1		12/12/17 16:27	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 16:27	108-88-3	
Total Haloether	**55.2**	ug/L	1.0	1		12/12/17 16:27		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 16:27	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-1D-3 **Lab ID: 2066645013** Collected: 12/06/17 11:30 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 16:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 16:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 16:27	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 16:27	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 16:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 16:27	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/12/17 16:27	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/12/17 16:27	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/12/17 16:27	1868-53-7	

Sample: FB-20171206 **Lab ID: 2066645014** Collected: 12/06/17 12:34 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		12/12/17 16:45	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 16:45	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 16:45	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 16:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 16:45	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 16:45	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 16:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 16:45	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 16:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 16:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 16:45	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 16:45	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 16:45	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/17 16:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 16:45	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 16:45	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 16:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 16:45	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 16:45	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 16:45	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 406	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 421	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 427	ND	ug/L	1.0	1		12/12/17 16:45		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: FB-20171206 **Lab ID: 2066645014** Collected: 12/06/17 12:34 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 508	ND	ug/L	1.0	1		12/12/17 16:45		
Haloether 528	ND	ug/L	1.0	1		12/12/17 16:45		
Halomar	ND	ug/L	1.0	1		12/12/17 16:45		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 16:45	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 16:45		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 16:45	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 16:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 16:45	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 16:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 16:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 16:45	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 16:45	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 16:45		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 16:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 16:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 16:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 16:45	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 16:45	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 16:45	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 16:45	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 16:45	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/12/17 16:45	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/12/17 16:45	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/12/17 16:45	1868-53-7	

Sample: MW-9-90 **Lab ID: 2066645015** Collected: 12/06/17 13:15 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/12/17 17:03	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/12/17 17:03	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/12/17 17:03	107-13-1	
Benzene	ND	ug/L	1.0	1		12/12/17 17:03	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/17 17:03	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/17 17:03	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/12/17 17:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/12/17 17:03	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/12/17 17:03	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/17 17:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/17 17:03	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/17 17:03	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/17 17:03	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2066645

Sample: MW-9-90 **Lab ID: 2066645015** Collected: 12/06/17 13:15 Received: 12/08/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/12/17 17:03	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/17 17:03	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/12/17 17:03	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/17 17:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 17:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/17 17:03	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/12/17 17:03	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/12/17 17:03	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 406	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 421	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 427	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 428	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 508	ND	ug/L	1.0	1		12/12/17 17:03		
Haloether 528	ND	ug/L	1.0	1		12/12/17 17:03		
Halomar	ND	ug/L	1.0	1		12/12/17 17:03		
2-Hexanone	ND	ug/L	2.0	1		12/12/17 17:03	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/12/17 17:03		
Methoxyflurane	ND	ug/L	1.0	1		12/12/17 17:03	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/12/17 17:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/12/17 17:03	108-10-1	
Styrene	ND	ug/L	1.0	1		12/12/17 17:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/17 17:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/12/17 17:03	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/17 17:03	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/12/17 17:03		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/17 17:03	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/17 17:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/17 17:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/17 17:03	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/12/17 17:03	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/12/17 17:03	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/12/17 17:03	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/17 17:03	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/12/17 17:03	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/12/17 17:03	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/12/17 17:03	1868-53-7	

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WO# : 2066645

2066645

Section A
Required Client Information:

Company: Arcadis
Address: #48 City View Plaza 1 Suite 401
Rd 165 KM 1.2, Guaynabo, PR 00968
Email:
Phone: Fax:
Requested Due Date:

Section B
Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order #:
Project Name: Fibers 2SAR2017 (PO#: CO001911.0005.17
Project #:

Section C
Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: craig.mccollum@pacelabs.com,
Pace Profile #: 1037 L12

Regulatory Agency:
State / Location: PR

Requested Analyses Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N) VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171204	WT	G			12/4/17	LAB		2				2						X			
2	EB-20171204	WT	G			12/4/17	0805		3				3					X				
3	FB-20171204	WT	G			12/4/17	1008		3				3					X				
4	MW-1A-3-BP	WT	G			12/4/17	1110		3				3					X				
5	MW-1D-3-BP	WT	G			12/4/17	1329		3				3					X				
6	EB-20171205	WT	G			12/5/17	0858		3				3					X				
7	FB-20171205	WT	G			12/5/17	0951		3				3					X				
8	MW-4B-2	WT	G			12/5/17	1045		3				3					X				
9	MW-4B-4	WT	G			12/5/17	1135		3				3					X				
10	MW-1	WT	G			12/5/17	1240		3				3					X				
11	MW-3A-4	WT	G			12/5/17	1331		3				3					X				
12	EB-20171206	WT	G			12/6/17	0830		3				3					X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV	Andrés Colón / Arcadis	12/6/17	1505	[illegible] / Pace	12/6/17	1505	4C	Y	N	Y
	Fed Ex	12/8/17	1030	Fed Ex / Pace	12/8/17	1030	3.1	Y	N/A	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colón

SIGNATURE of SAMPLER: [illegible]

DATE Signed: 12/6/17

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	MW-1D-3	WT	G			12/6/17	1130		3				3					X				
2	FB-20171206	WT	G			12/6/17	1234		3				3					X				
3	MW-9-90	WT	G			12/6/17	1315		3				3					X				
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV	Arcadis	12/6/17	1505	Pace	12/6/17	1505				
		12/6/17	Nico	FedEx						
	FedEx	12/8/17	1030	Pace	12/8/17	1030	3.1	Y	Y	Y

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Angel Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/10/17

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2067491
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29209R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2067491 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171211	2067491001	Water	12/11/2017		X				
EB-20171211	2067491002	Water	12/11/2017		X				
FB-20171211	2067491003	Water	12/11/2017		X				
MW-1A-2	2067491004	Water	12/11/2017		X				
MW-6-90	2067491005	Water	12/11/2017		X				
EB-20171212	2067491006	Water	12/12/2017		X				
FB-20171212	2067491007	Water	12/12/2017		X				
MW-11-20	2067491008	Water	12/12/2017		X				
MW-19-90	2067491009	Water	12/12/2017		X				
EB-20171213	2067491010	Water	12/13/2017		X				
FB-20171213	2067491011	Water	12/13/2017		X				
MW-15-90	2067491012	Water	12/13/2017		X				
MW-17-90	2067491013	Water	12/13/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-1A-2 for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-1A-2	Bromoform (TB)	Detected sample results >RL and <BAL	"UB" at detected sample concentration
MW-19-90 MW-15-90	Acetone (FB)		

RL Reporting limit
FB Field Blank
TB Trip Blank

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location associated with this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X	X		
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: January 31, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: TB-20171211 **Lab ID: 2067491001** Collected: 12/11/17 00:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 17:32	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 17:32	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 17:32	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 17:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 17:32	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		12/21/17 17:32	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 17:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 17:32	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 17:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 17:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 17:32	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 17:32	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 17:32	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 17:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 17:32	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 17:32	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 17:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:32	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 17:32	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 17:32	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 406	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 421	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 427	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 428	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 508	ND	ug/L	1.0	1		12/21/17 17:32		
Haloether 528	ND	ug/L	1.0	1		12/21/17 17:32		
Halomar	ND	ug/L	1.0	1		12/21/17 17:32		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 17:32	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 17:32		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 17:32	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 17:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 17:32	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 17:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 17:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 17:32	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 17:32	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 17:32		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 17:32	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: TB-20171211 **Lab ID: 2067491001** Collected: 12/11/17 00:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 17:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 17:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 17:32	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 17:32	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 17:32	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 17:32	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/21/17 17:32	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/21/17 17:32	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/21/17 17:32	1868-53-7	

Sample: EB-20171211 **Lab ID: 2067491002** Collected: 12/11/17 08:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 17:50	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 17:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 17:50	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 17:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 17:50	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		12/21/17 17:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 17:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 17:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 17:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 17:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 17:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 17:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 17:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 17:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 17:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 17:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 17:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:50	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 17:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 17:50	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 406	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 421	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 427	ND	ug/L	1.0	1		12/21/17 17:50		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171211 **Lab ID: 2067491002** Collected: 12/11/17 08:00 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 508	ND	ug/L	1.0	1		12/21/17 17:50		
Haloether 528	ND	ug/L	1.0	1		12/21/17 17:50		
Halomar	ND	ug/L	1.0	1		12/21/17 17:50		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 17:50	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 17:50		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 17:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 17:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 17:50	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 17:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 17:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 17:50	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 17:50	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 17:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 17:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 17:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 17:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 17:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 17:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 17:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 17:50	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/21/17 17:50	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/21/17 17:50	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/21/17 17:50	1868-53-7	

Sample: FB-20171211 **Lab ID: 2067491003** Collected: 12/11/17 10:12 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 18:08	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 18:08	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 18:08	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 18:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 18:08	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		12/21/17 18:08	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 18:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 18:08	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 18:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 18:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 18:08	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 18:08	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 18:08	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171211 **Lab ID: 2067491003** Collected: 12/11/17 10:12 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/21/17 18:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 18:08	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 18:08	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 18:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:08	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 18:08	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 18:08	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 406	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 421	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 427	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 428	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 508	ND	ug/L	1.0	1		12/21/17 18:08		
Haloether 528	ND	ug/L	1.0	1		12/21/17 18:08		
Halomar	ND	ug/L	1.0	1		12/21/17 18:08		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 18:08	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 18:08		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 18:08	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 18:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 18:08	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 18:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 18:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 18:08	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 18:08	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 18:08		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 18:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 18:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 18:08	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 18:08	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 18:08	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 18:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 18:08	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/21/17 18:08	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		12/21/17 18:08	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/21/17 18:08	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-1A-2 **Lab ID: 2067491004** Collected: 12/11/17 11:19 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 17:14	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 17:14	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 17:14	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 17:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 17:14	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		12/21/17 17:14	75-25-2	UB
Bromomethane	ND	ug/L	1.0	1		12/21/17 17:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 17:14	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 17:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 17:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 17:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 17:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 17:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 17:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 17:14	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 17:14	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 17:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 17:14	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 17:14	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 17:14	100-41-4	
Haloether 229	**1.4**	ug/L	1.0	1		12/21/17 17:14		
Haloether 406	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 421	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 427	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 428	ND	ug/L	1.0	1		12/21/17 17:14		
Haloether 508	**3.6**	ug/L	1.0	1		12/21/17 17:14		
Haloether 528	ND	ug/L	1.0	1		12/21/17 17:14		
Halomar	ND	ug/L	1.0	1		12/21/17 17:14		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 17:14	591-78-6	
Isoflurane	**8.1**	ug/L	1.0	1		12/21/17 17:14		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 17:14	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 17:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 17:14	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 17:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 17:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 17:14	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 17:14	108-88-3	
Total Haloether	**13.1**	ug/L	1.0	1		12/21/17 17:14		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 17:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 17:14	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-1A-2 **Lab ID: 2067491004** Collected: 12/11/17 11:19 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 17:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 17:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 17:14	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 17:14	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 17:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 17:14	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/21/17 17:14	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/21/17 17:14	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/21/17 17:14	1868-53-7	

Sample: MW-6-90 **Lab ID: 2067491005** Collected: 12/11/17 12:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 18:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 18:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 18:25	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 18:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 18:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/21/17 18:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 18:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 18:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 18:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 18:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 18:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 18:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 18:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 18:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 18:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 18:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 18:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 18:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 18:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 406	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 421	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 427	ND	ug/L	1.0	1		12/21/17 18:25		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-6-90 **Lab ID: 2067491005** Collected: 12/11/17 12:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/21/17 18:25		
Haloether 508	**5.1**	ug/L	1.0	1		12/21/17 18:25		
Haloether 528	ND	ug/L	1.0	1		12/21/17 18:25		
Halomar	ND	ug/L	1.0	1		12/21/17 18:25		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 18:25	591-78-6	
Isoflurane	**2.7**	ug/L	1.0	1		12/21/17 18:25		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 18:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 18:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 18:25	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 18:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 18:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 18:25	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 18:25	108-88-3	
Total Haloether	**7.8**	ug/L	1.0	1		12/21/17 18:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 18:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 18:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 18:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 18:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 18:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 18:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 18:25	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%.	79-119	1		12/21/17 18:25	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/21/17 18:25	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/21/17 18:25	1868-53-7	

Sample: EB-20171212 **Lab ID: 2067491006** Collected: 12/12/17 07:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/21/17 18:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 18:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 18:43	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 18:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 18:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/21/17 18:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 18:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 18:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 18:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 18:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 18:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 18:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 18:43	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171212 **Lab ID: 2067491006** Collected: 12/12/17 07:40 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/21/17 18:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 18:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 18:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 18:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 18:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 18:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 18:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 406	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 421	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 427	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 428	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 508	ND	ug/L	1.0	1		12/21/17 18:43		
Haloether 528	ND	ug/L	1.0	1		12/21/17 18:43		
Halomar	ND	ug/L	1.0	1		12/21/17 18:43		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 18:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 18:43		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 18:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 18:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 18:43	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 18:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 18:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 18:43	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 18:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 18:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 18:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 18:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 18:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 18:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 18:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 18:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 18:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 18:43	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/21/17 18:43	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/21/17 18:43	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		12/21/17 18:43	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171212 **Lab ID: 2067491007** Collected: 12/12/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**13.0**	ug/L	4.0	1		12/21/17 19:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/21/17 19:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/21/17 19:01	107-13-1	
Benzene	ND	ug/L	1.0	1		12/21/17 19:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/21/17 19:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/21/17 19:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/21/17 19:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/21/17 19:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/21/17 19:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/21/17 19:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/21/17 19:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/21/17 19:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/21/17 19:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/21/17 19:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/21/17 19:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/21/17 19:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/21/17 19:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 19:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/21/17 19:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/21/17 19:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/21/17 19:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 406	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 421	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 427	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 428	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 508	ND	ug/L	1.0	1		12/21/17 19:01		
Haloether 528	ND	ug/L	1.0	1		12/21/17 19:01		
Halomar	ND	ug/L	1.0	1		12/21/17 19:01		
2-Hexanone	ND	ug/L	2.0	1		12/21/17 19:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/21/17 19:01		
Methoxyflurane	ND	ug/L	1.0	1		12/21/17 19:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/21/17 19:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/21/17 19:01	108-10-1	
Styrene	ND	ug/L	1.0	1		12/21/17 19:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/21/17 19:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/21/17 19:01	127-18-4	
Toluene	ND	ug/L	1.0	1		12/21/17 19:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/21/17 19:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/21/17 19:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/21/17 19:01	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171212 **Lab ID: 2067491007** Collected: 12/12/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/21/17 19:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/21/17 19:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/21/17 19:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/21/17 19:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/21/17 19:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/21/17 19:01	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/21/17 19:01	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/21/17 19:01	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/21/17 19:01	1868-53-7	

Sample: MW-11-20 **Lab ID: 2067491008** Collected: 12/12/17 10:59 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/22/17 11:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 11:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:05	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:05	10061-02-6	
Enflurane	**5.0**	ug/L	1.0	1		12/22/17 11:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:05		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-11-20 **Lab ID: 2067491008** Collected: 12/12/17 10:59 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:05		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:05		
Halomar	**2.7**	ug/L	1.0	1		12/22/17 11:05		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:05		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:05	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:05	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:05	108-88-3	
Total Haloether	**7.7**	ug/L	1.0	1		12/22/17 11:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:05	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/22/17 11:05	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/22/17 11:05	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/22/17 11:05	1868-53-7	

Sample: MW-19-90 **Lab ID: 2067491009** Collected: 12/12/17 12:58 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.4**	ug/L	4.0	1		12/22/17 11:22	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/22/17 11:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:22	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:22	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-19-90 **Lab ID: 2067491009** Collected: 12/12/17 12:58 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 11:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:22	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:22		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:22		
Halomar	ND	ug/L	1.0	1		12/22/17 11:22		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:22	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:22		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:22	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:22	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:22	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 11:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:22	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 11:22	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/22/17 11:22	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/22/17 11:22	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171213 **Lab ID: 2067491010** Collected: 12/13/17 07:49 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**10.2**	ug/L	4.0	1		12/22/17 11:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 11:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 11:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:40		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:40		
Halomar	ND	ug/L	1.0	1		12/22/17 11:40		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:40	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:40		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:40	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 11:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:40	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: EB-20171213 **Lab ID: 2067491010** Collected: 12/13/17 07:49 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:40	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		12/22/17 11:40	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/22/17 11:40	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/22/17 11:40	1868-53-7	

Sample: FB-20171213 **Lab ID: 2067491011** Collected: 12/13/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**16.1**	ug/L	4.0	1		12/22/17 11:58	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 11:58	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 11:58	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 11:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 11:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 11:58	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 11:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 11:58	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 11:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 11:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 11:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 11:58	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 11:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 11:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 11:58	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 11:58	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 11:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 11:58	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 11:58	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 11:58	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 406	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 421	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 427	ND	ug/L	1.0	1		12/22/17 11:58		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: FB-20171213 **Lab ID: 2067491011** Collected: 12/13/17 09:34 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 508	ND	ug/L	1.0	1		12/22/17 11:58		
Haloether 528	ND	ug/L	1.0	1		12/22/17 11:58		
Halomar	ND	ug/L	1.0	1		12/22/17 11:58		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 11:58	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 11:58		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 11:58	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 11:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 11:58	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 11:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 11:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 11:58	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 11:58	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 11:58		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 11:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 11:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 11:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 11:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 11:58	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 11:58	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 11:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 11:58	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 11:58	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		12/22/17 11:58	460-00-4	
Dibromofluoromethane (S)	96	%.	72-126	1		12/22/17 11:58	1868-53-7	

Sample: MW-15-90 **Lab ID: 2067491012** Collected: 12/13/17 11:08 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.2**	ug/L	4.0	1		12/22/17 12:16	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		12/22/17 12:16	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 12:16	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 12:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 12:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 12:16	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 12:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 12:16	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 12:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 12:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 12:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 12:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 12:16	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-15-90 **Lab ID: 2067491012** Collected: 12/13/17 11:08 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/22/17 12:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 12:16	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 12:16	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:16	75-35-4	
cis-1,2-Dichloroethene	**1.0**	ug/L	1.0	1		12/22/17 12:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 12:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:16	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 12:16	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 12:16	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 406	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 421	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 427	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 428	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 508	ND	ug/L	1.0	1		12/22/17 12:16		
Haloether 528	ND	ug/L	1.0	1		12/22/17 12:16		
Halomar	ND	ug/L	1.0	1		12/22/17 12:16		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 12:16	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 12:16		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 12:16	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 12:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 12:16	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 12:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 12:16	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		12/22/17 12:16	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 12:16	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 12:16		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:16	79-00-5	
Trichloroethene	**1.4**	ug/L	1.0	1		12/22/17 12:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 12:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 12:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 12:16	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 12:16	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 12:16	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 12:16	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 12:16	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		12/22/17 12:16	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/22/17 12:16	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-17-90 **Lab ID: 2067491013** Collected: 12/13/17 13:24 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/22/17 12:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/22/17 12:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/22/17 12:33	107-13-1	
Benzene	ND	ug/L	1.0	1		12/22/17 12:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/22/17 12:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/22/17 12:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/22/17 12:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/22/17 12:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/22/17 12:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/22/17 12:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/22/17 12:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/22/17 12:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/22/17 12:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/22/17 12:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/22/17 12:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/22/17 12:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/22/17 12:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/22/17 12:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/22/17 12:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/22/17 12:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 406	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 421	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 427	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 428	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 508	ND	ug/L	1.0	1		12/22/17 12:33		
Haloether 528	ND	ug/L	1.0	1		12/22/17 12:33		
Halomar	ND	ug/L	1.0	1		12/22/17 12:33		
2-Hexanone	ND	ug/L	2.0	1		12/22/17 12:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/22/17 12:33		
Methoxyflurane	ND	ug/L	1.0	1		12/22/17 12:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/22/17 12:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/22/17 12:33	108-10-1	
Styrene	ND	ug/L	1.0	1		12/22/17 12:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/22/17 12:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/22/17 12:33	127-18-4	
Toluene	ND	ug/L	1.0	1		12/22/17 12:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/22/17 12:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/22/17 12:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/22/17 12:33	79-01-6	

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Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067491

Sample: MW-17-90 **Lab ID: 2067491013** Collected: 12/13/17 13:24 Received: 12/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/22/17 12:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/22/17 12:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/22/17 12:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/22/17 12:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/22/17 12:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/22/17 12:33	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		12/22/17 12:33	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		12/22/17 12:33	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/22/17 12:33	1868-53-7	

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WO# : 2067491

2067491

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.17(
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	TB-20171211	WT	G			12/11/17	LAB		2				2							X			
2	EB-20171211	WT	G			12/11/17	0800		3				3						X				
3	FB-20171211	WT	G			12/11/17	1012		3				3						X				
4	MW-1A-2	WT	G			12/11/17	1119		3				3						X				
5	MW-6-90	WT	G			12/11/17	1240		3				3						X				
6	EB-20171212	WT	G			12/12/17	0740		3				3						X				
7	FB-20171212	WT	G			12/12/17	0934		3				3						X				
8	MW-11-20	WT	G			12/12/17	1059		3				3						X				
9	MW-19-90	WT	G			12/12/17	1258		3				3						X				
10	EB-20171213	WT	G			12/13/17	0747		3				3						X				
11	FB-20171213	WT	G			12/13/17	0934		3				3						X				
12	MW-15-90	WT	G			12/13/17	1108		3				3						X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colón Arcadis	12/18/17	1418	[illegible]	12/14/17	0:19	30	Y	N	Y
				Fed Ex						
	Fed Ex	12/19/17	0915	[illegible]	12/19/17	0915	1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Andrés Colón
SIGNATURE of SAMPLER:	[illegible]
DATE Signed:	12/14/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017 (PO#: CO001911.0005.170
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	Chloride by 300.0	DI H2O	Residual Chlorine (Y/N)
1	MW-17-90	WT	G			12/13/17	1324		3				3					X				
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andrew Colon Arcadis	12/14/17	1819	PACE	12/14/17	18:19	30	Y	U	Y
	FedEx 12/19/17 0915			FedEx 12/19/17 0915			1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/14/17

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2067700
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29223R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2067700 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171219	2067700001	Water	12/19/2017		X				
EB-20171219	2067700002	Water	12/19/2017		X				
FB-20171219	2067700003	Water	12/19/2017		X				
MW-22-90	2067700004	Water	12/19/2017		X				
GWDUP002	2067700005	Water	12/19/2017	MW-22-90	X				
AN-1	2067700006	Water	12/19/2017		X				
EB-20171220	2067700007	Water	12/20/2017		X				
MW-4-90	2067700008	Water	12/20/2017		X				
FB-20171220	2067700009	Water	12/20/2017		X				
OW-1	2067700010	Water	12/20/2017		X				
PCMW-5	2067700011	Water	12/20/2017		X				
FB-20171221	2067700012	Water	12/21/2017		X				
EB-20171221	2067700013	Water	12/21/2017		X				
AN-2	2067700014	Water	12/21/2017		X				
MW-5-90	2067700015	Water	12/21/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location AN-1 for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, no qualification of the sample results was required.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-22-90 / GWDUP002	All compounds	U	U	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: February 2, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: TB-20171219 **Lab ID: 2067700001** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 12:22	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:22	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:22	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:22	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:22		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:22		
Halomar	ND	ug/L	1.0	1		12/27/17 12:22		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:22	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:22		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:22	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:22	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:22	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:22	79-01-6	

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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: TB-20171219 **Lab ID: 2067700001** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:22	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 12:22	2037-26-5	
4-Bromofluorobenzene (S)	111	%.	68-124	1		12/27/17 12:22	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 12:22	1868-53-7	

Sample: EB-20171219 **Lab ID: 2067700002** Collected: 12/19/17 08:20 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.4**	ug/L	4.0	1		12/27/17 12:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:40		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171219 **Lab ID: 2067700002** Collected: 12/19/17 08:20 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:40		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:40		
Halomar	ND	ug/L	1.0	1		12/27/17 12:40		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:40	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:40		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:40	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 12:40	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 12:40	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/27/17 12:40	1868-53-7	

Sample: FB-20171219 **Lab ID: 2067700003** Collected: 12/19/17 09:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**10.7**	ug/L	4.0	1		12/27/17 12:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:57	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:57	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: FB-20171219 **Lab ID: 2067700003** Collected: 12/19/17 09:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:57		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:57		
Halomar	ND	ug/L	1.0	1		12/27/17 12:57		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:57		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:57	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:57	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:57	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 12:57	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		12/27/17 12:57	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 12:57	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-22-90 **Lab ID: 2067700004** Collected: 12/19/17 11:15 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 13:15	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 13:15	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 13:15	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 13:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 13:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 13:15	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 13:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 13:15	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 13:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 13:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 13:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 13:15	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 13:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 13:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 13:15	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 13:15	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 13:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:15	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 13:15	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 13:15	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 406	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 421	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 427	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 428	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 508	ND	ug/L	1.0	1		12/27/17 13:15		
Haloether 528	ND	ug/L	1.0	1		12/27/17 13:15		
Halomar	ND	ug/L	1.0	1		12/27/17 13:15		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 13:15	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 13:15		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 13:15	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 13:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 13:15	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 13:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 13:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 13:15	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 13:15	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 13:15		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 13:15	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-22-90 **Lab ID: 2067700004** Collected: 12/19/17 11:15 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 13:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 13:15	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 13:15	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 13:15	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 13:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 13:15	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/27/17 13:15	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 13:15	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/27/17 13:15	1868-53-7	

Sample: GWDUP002 **Lab ID: 2067700005** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 13:51	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 13:51	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 13:51	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 13:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 13:51	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 13:51	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 13:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 13:51	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 13:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 13:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 13:51	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 13:51	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 13:51	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 13:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 13:51	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 13:51	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 13:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 13:51	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 13:51	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 13:51	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 406	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 421	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 427	ND	ug/L	1.0	1		12/27/17 13:51		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: GWDUP002 **Lab ID: 2067700005** Collected: 12/19/17 00:00 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 508	ND	ug/L	1.0	1		12/27/17 13:51		
Haloether 528	ND	ug/L	1.0	1		12/27/17 13:51		
Halomar	ND	ug/L	1.0	1		12/27/17 13:51		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 13:51	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 13:51		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 13:51	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 13:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 13:51	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 13:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 13:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 13:51	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 13:51	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 13:51		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 13:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 13:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 13:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 13:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 13:51	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 13:51	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 13:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 13:51	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 13:51	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/27/17 13:51	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/27/17 13:51	1868-53-7	

Sample: AN-1 **Lab ID: 2067700006** Collected: 12/19/17 14:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 12:04	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 12:04	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 12:04	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 12:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 12:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 12:04	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 12:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 12:04	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 12:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 12:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 12:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 12:04	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 12:04	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: AN-1 **Lab ID: 2067700006** Collected: 12/19/17 14:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 12:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 12:04	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 12:04	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 12:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 12:04	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 12:04	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 12:04	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 406	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 421	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 427	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 428	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 508	ND	ug/L	1.0	1		12/27/17 12:04		
Haloether 528	ND	ug/L	1.0	1		12/27/17 12:04		
Halomar	ND	ug/L	1.0	1		12/27/17 12:04		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 12:04	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 12:04		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 12:04	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 12:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 12:04	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 12:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 12:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 12:04	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 12:04	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 12:04		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 12:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 12:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 12:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 12:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 12:04	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 12:04	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 12:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 12:04	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		12/27/17 12:04	2037-26-5	
4-Bromofluorobenzene (S)	110	%.	68-124	1		12/27/17 12:04	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 12:04	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171220 **Lab ID: 2067700007** Collected: 12/20/17 08:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**13.5**	ug/L	4.0	1		12/27/17 14:08	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 14:08	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 14:08	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 14:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 14:08	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		12/27/17 14:08	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 14:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 14:08	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 14:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 14:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 14:08	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 14:08	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 14:08	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 14:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 14:08	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 14:08	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 14:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:08	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 14:08	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 14:08	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 406	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 421	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 427	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 428	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 508	ND	ug/L	1.0	1		12/27/17 14:08		
Haloether 528	ND	ug/L	1.0	1		12/27/17 14:08		
Halomar	ND	ug/L	1.0	1		12/27/17 14:08		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 14:08	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 14:08		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 14:08	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 14:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 14:08	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 14:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 14:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 14:08	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 14:08	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 14:08		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 14:08	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171220 **Lab ID: 2067700007** Collected: 12/20/17 08:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 14:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 14:08	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 14:08	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 14:08	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 14:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 14:08	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 14:08	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 14:08	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 14:08	1868-53-7	

Sample: MW-4-90 **Lab ID: 2067700008** Collected: 12/20/17 11:08 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 14:26	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 14:26	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 14:26	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 14:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 14:26	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 14:26	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 14:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 14:26	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 14:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 14:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 14:26	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 14:26	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 14:26	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 14:26	74-87-3	
Dibromochloromethane	**1.0**	ug/L	1.0	1		12/27/17 14:26	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 14:26	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 14:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:26	10061-02-6	
Enflurane	**6.9**	ug/L	1.0	1		12/27/17 14:26	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 14:26	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 406	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 421	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 427	ND	ug/L	1.0	1		12/27/17 14:26		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-4-90 **Lab ID: 2067700008** Collected: 12/20/17 11:08 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 14:26		
Haloether 508	**5.0**	ug/L	1.0	1		12/27/17 14:26		
Haloether 528	ND	ug/L	1.0	1		12/27/17 14:26		
Halomar	**5.0**	ug/L	1.0	1		12/27/17 14:26		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 14:26	591-78-6	
Isoflurane	**7.3**	ug/L	1.0	1		12/27/17 14:26		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 14:26	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 14:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 14:26	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 14:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 14:26	79-34-5	
Tetrachloroethene	**1.0**	ug/L	1.0	1		12/27/17 14:26	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 14:26	108-88-3	
Total Haloether	**24.2**	ug/L	1.0	1		12/27/17 14:26		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 14:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 14:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 14:26	96-18-4	
1,1,2-Trichlorotrifluoroethane	**3.0**	ug/L	1.0	1		12/27/17 14:26	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 14:26	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 14:26	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 14:26	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/27/17 14:26	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		12/27/17 14:26	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		12/27/17 14:26	1868-53-7	

Sample: FB-20171220 **Lab ID: 2067700009** Collected: 12/20/17 11:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 14:44	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 14:44	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 14:44	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 14:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 14:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 14:44	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 14:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 14:44	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 14:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 14:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 14:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 14:44	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 14:44	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: FB-20171220 **Lab ID: 2067700009** Collected: 12/20/17 11:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 14:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 14:44	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 14:44	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 14:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 14:44	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 14:44	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 14:44	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 406	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 421	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 427	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 428	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 508	ND	ug/L	1.0	1		12/27/17 14:44		
Haloether 528	ND	ug/L	1.0	1		12/27/17 14:44		
Halomar	ND	ug/L	1.0	1		12/27/17 14:44		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 14:44	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 14:44		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 14:44	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 14:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 14:44	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 14:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 14:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 14:44	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 14:44	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 14:44		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 14:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 14:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 14:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 14:44	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 14:44	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 14:44	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 14:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 14:44	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 14:44	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		12/27/17 14:44	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/27/17 14:44	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: OW-1 **Lab ID: 2067700010** Collected: 12/20/17 13:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 17:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 17:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 17:40	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 17:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 17:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 17:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 17:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 17:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 17:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 17:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 17:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 17:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 17:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 17:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 17:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 17:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 17:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 17:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 17:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 17:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 17:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 406	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 421	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 427	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 428	ND	ug/L	1.0	1		12/27/17 17:40		
Haloether 508	**47.8**	ug/L	1.0	1		12/27/17 17:40		
Haloether 528	ND	ug/L	1.0	1		12/27/17 17:40		
Halomar	ND	ug/L	1.0	1		12/27/17 17:40		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 17:40	591-78-6	
Isoflurane	**1.7**	ug/L	1.0	1		12/27/17 17:40		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 17:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 17:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 17:40	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 17:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 17:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 17:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 17:40	108-88-3	
Total Haloether	**49.5**	ug/L	1.0	1		12/27/17 17:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 17:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 17:40	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: OW-1 **Lab ID: 2067700010** Collected: 12/20/17 13:10 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 17:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 17:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 17:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 17:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 17:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 17:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 17:40	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/27/17 17:40	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/27/17 17:40	1868-53-7	

Sample: PCMW-5 **Lab ID: 2067700011** Collected: 12/20/17 13:47 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 15:19	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 15:19	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 15:19	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 15:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 15:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 15:19	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 15:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 15:19	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 15:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 15:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 15:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 15:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 15:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 15:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 15:19	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 15:19	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 15:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:19	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 15:19	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 15:19	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 406	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 421	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 427	ND	ug/L	1.0	1		12/27/17 15:19		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: PCMW-5 **Lab ID: 2067700011** Collected: 12/20/17 13:47 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 15:19		
Haloether 508	**6.9**	ug/L	1.0	1		12/27/17 15:19		
Haloether 528	ND	ug/L	1.0	1		12/27/17 15:19		
Halomar	ND	ug/L	1.0	1		12/27/17 15:19		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 15:19	591-78-6	
Isoflurane	**1.8**	ug/L	1.0	1		12/27/17 15:19		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 15:19	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 15:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 15:19	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 15:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 15:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 15:19	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 15:19	108-88-3	
Total Haloether	**8.7**	ug/L	1.0	1		12/27/17 15:19		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 15:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 15:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 15:19	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 15:19	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 15:19	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 15:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 15:19	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		12/27/17 15:19	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		12/27/17 15:19	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		12/27/17 15:19	1868-53-7	

Sample: FB-20171221 **Lab ID: 2067700012** Collected: 12/21/17 09:33 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.3**	ug/L	4.0	1		12/27/17 15:37	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 15:37	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 15:37	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 15:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 15:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 15:37	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 15:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 15:37	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 15:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 15:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 15:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 15:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 15:37	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: FB-20171221 **Lab ID: 2067700012** Collected: 12/21/17 09:33 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 15:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 15:37	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 15:37	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 15:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:37	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 15:37	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 15:37	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 406	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 421	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 427	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 428	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 508	ND	ug/L	1.0	1		12/27/17 15:37		
Haloether 528	ND	ug/L	1.0	1		12/27/17 15:37		
Halomar	ND	ug/L	1.0	1		12/27/17 15:37		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 15:37	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 15:37		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 15:37	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 15:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 15:37	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 15:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 15:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 15:37	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 15:37	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 15:37		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 15:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 15:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 15:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 15:37	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 15:37	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 15:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 15:37	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	79-119	1		12/27/17 15:37	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		12/27/17 15:37	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/27/17 15:37	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171221 **Lab ID: 2067700013** Collected: 12/21/17 08:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.9**	ug/L	4.0	1		12/27/17 15:55	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 15:55	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 15:55	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 15:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 15:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 15:55	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 15:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 15:55	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 15:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 15:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 15:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 15:55	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 15:55	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 15:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 15:55	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 15:55	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 15:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 15:55	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 15:55	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 15:55	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 406	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 421	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 427	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 428	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 508	ND	ug/L	1.0	1		12/27/17 15:55		
Haloether 528	ND	ug/L	1.0	1		12/27/17 15:55		
Halomar	ND	ug/L	1.0	1		12/27/17 15:55		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 15:55	591-78-6	
Isoflurane	ND	ug/L	1.0	1		12/27/17 15:55		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 15:55	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 15:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 15:55	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 15:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 15:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 15:55	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 15:55	108-88-3	
Total Haloether	ND	ug/L	1.0	1		12/27/17 15:55		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 15:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 15:55	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: EB-20171221 **Lab ID: 2067700013** Collected: 12/21/17 08:40 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 15:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 15:55	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 15:55	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 15:55	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 15:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 15:55	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		12/27/17 15:55	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		12/27/17 15:55	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		12/27/17 15:55	1868-53-7	

Sample: AN-2 **Lab ID: 2067700014** Collected: 12/21/17 10:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 16:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 16:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 16:12	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 16:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 16:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 16:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 16:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 16:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 16:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 16:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 16:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 16:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 16:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/27/17 16:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 16:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 16:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 16:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 16:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 16:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 406	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 421	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 427	ND	ug/L	1.0	1		12/27/17 16:12		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: AN-2 **Lab ID: 2067700014** Collected: 12/21/17 10:19 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		12/27/17 16:12		
Haloether 508	**3.1**	ug/L	1.0	1		12/27/17 16:12		
Haloether 528	ND	ug/L	1.0	1		12/27/17 16:12		
Halomar	ND	ug/L	1.0	1		12/27/17 16:12		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 16:12	591-78-6	
Isoflurane	**7.1**	ug/L	1.0	1		12/27/17 16:12		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 16:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 16:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 16:12	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 16:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 16:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 16:12	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 16:12	108-88-3	
Total Haloether	**10.2**	ug/L	1.0	1		12/27/17 16:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 16:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 16:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 16:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 16:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 16:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 16:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 16:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		12/27/17 16:12	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		12/27/17 16:12	460-00-4	
Dibromofluoromethane (S)	97	%.	72-126	1		12/27/17 16:12	1868-53-7	

Sample: MW-5-90 **Lab ID: 2067700015** Collected: 12/21/17 11:13 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		12/27/17 16:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		12/27/17 16:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		12/27/17 16:30	107-13-1	
Benzene	ND	ug/L	1.0	1		12/27/17 16:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		12/27/17 16:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/27/17 16:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/27/17 16:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		12/27/17 16:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/27/17 16:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/27/17 16:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/27/17 16:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/27/17 16:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/27/17 16:30	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067700

Sample: MW-5-90 **Lab ID: 2067700015** Collected: 12/21/17 11:13 Received: 12/23/17 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		12/27/17 16:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/27/17 16:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		12/27/17 16:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/27/17 16:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/27/17 16:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		12/27/17 16:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		12/27/17 16:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 406	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 421	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 427	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 428	ND	ug/L	1.0	1		12/27/17 16:30		
Haloether 508	**3.4**	ug/L	1.0	1		12/27/17 16:30		
Haloether 528	ND	ug/L	1.0	1		12/27/17 16:30		
Halomar	ND	ug/L	1.0	1		12/27/17 16:30		
2-Hexanone	ND	ug/L	2.0	1		12/27/17 16:30	591-78-6	
Isoflurane	**8.5**	ug/L	1.0	1		12/27/17 16:30		
Methoxyflurane	ND	ug/L	1.0	1		12/27/17 16:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		12/27/17 16:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		12/27/17 16:30	108-10-1	
Styrene	ND	ug/L	1.0	1		12/27/17 16:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/27/17 16:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/27/17 16:30	127-18-4	
Toluene	ND	ug/L	1.0	1		12/27/17 16:30	108-88-3	
Total Haloether	**11.8**	ug/L	1.0	1		12/27/17 16:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/27/17 16:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/27/17 16:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/27/17 16:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/27/17 16:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		12/27/17 16:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		12/27/17 16:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		12/27/17 16:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/27/17 16:30	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		12/27/17 16:30	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		12/27/17 16:30	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		12/27/17 16:30	1868-53-7	

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. A

WO# : 2067700

2067700

965988

Section A Required Client Information:

Company: Arcadis
Address: 48 City View Plaza Suite 401
Rd 165 KM 1.2 Guaynabo P.R. 00968
Email To:
Phone: Fax:
Requested Due Date/TAT: 10 days.

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Flores 25 9/2017 (PO# C000191 1.0005.176
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: craig.mccollum@pacelab.com
Pace Profile #: 1037 L12

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): Trip Blank	VOCs 8260 - Halo	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-20171219	WT	G			12/19/17	LAB		2				2					X			
2	EB-20171219	WT	G			12/19/17	0820		3				3						X		
3	FB-20171219	WT	G			12/19/17	0940		3				3						X		
4	MW-22-90	WT	G			12/19/17	1115		3				3						X		
5	GWDUP002	WT	G			12/19/17	/		3				3						X		
6	AN-1	WT	G			12/19/17	1419		3				3						X		
7	AN-1 (MS)	WT	G			12/19/17	1419		3				3						X		
8	AN-1 (MSD)	WT	G			12/19/17	1419		3				3						X		
9	EB-20171220	WT	G			12/20/17	0810		3				3						X		
10	MW-4-90	WT	G			12/20/17	1108		3				3						X		
11	FB-20171220	WT	G			12/20/17	1110		3				3						X		
12	OW-1	WT	G			12/20/17	1310		3				3						X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andy Colon / Arcadis	12/21/17	15:15	Pablo Guzman-Pace	12/21/17	15:15	4°C	Y	N	Y
	[illegible] / AEC	12/21/17	17:00	FedEx						
	FedEx	12/23/17	0945	[illegible]	12/23/17	0945	2.2	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andy Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12/21/17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

1965987

Section A Required Client Information:

Company: Arcadis
Address: 48 City View Plaza Suite 401 RD 165 Km 1.2 Guaynabo P.R. 00968
Email To:
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Fibers 2SAR2017 (P.O# 10001911.0005.196
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Craig.Mcclure@pacelabs.com
Pace Profile #: 1037 L12

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOC 8260 - Halos	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	PCMW-5	WT	G			12/20/17	1347		3				3					X		
2	FB-20171221	WT	G			12/21/17	0933		3				3					X		
3	EB-20171221	WT	G			12/21/17	0840		3				3					X		
4	AN-2	WT	G			12/21/17	1019		3				3					X		
5	MW-5-90	WT	G			12/21/17	1113		3				3					X		
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colom / Arcadis	12/21/17	1515	[illegible] / Pace	12/21/17	1515	4.8	Y	N	Y
	[illegible] / Pace	12/21/17	17:00	FedEx						
	FedEx	12/23/17	0945	[illegible] / Pace	12/23/17	0945	2.2	Y	Y	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Andrés Colom
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 12/21/17

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2067983
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29224R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2067983 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20171227	2067983001	Water	12/27/2017		X				
EB-20171227	2067983002	Water	12/27/2017		X				
FB-20171227	2067983003	Water	12/27/2017		X				
MW-3A-1BR	2067983004	Water	12/27/2017		X				
MW-3A-2	2067983005	Water	12/27/2017		X				
MW-3A-3	2067983006	Water	12/27/2017		X				
EB-20171228	2067983007	Water	12/28/2017		X				
FB-20171228	2067983008	Water	12/28/2017		X				
FMW-4-20	2067983009	Water	12/28/2017		X				
FMW-4-90	2067983010	Water	12/28/2017		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-3A-1BR for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the RL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
PCMW-2 / GWDUP001	cis-1,2-Dichloroethene	2.0	1.9	AC
	Tetrachloroethene	10.5	9.6	9.0%
	Trichloroethene	1.5	1.3	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Note: The laboratory qualified a Methylene Chloride results with a C9 qualifier to indicate that this compound is a “Common Laboratory Contaminant”. Methylene Chloride was not detected above the reporting limit in any samples (field and QC) associated with this SDG. This qualifier was removed for reporting purposes.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X		X	
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: February 2, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: TB-20171227 **Lab ID: 2067983001** Collected: 12/27/17 00:00 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 12:56	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 12:56	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 12:56	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 12:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 12:56	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 12:56	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 12:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 12:56	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 12:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 12:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 12:56	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 12:56	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 12:56	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 12:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 12:56	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 12:56	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 12:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:56	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 12:56	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 12:56	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 406	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 421	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 427	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 428	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 508	ND	ug/L	1.0	1		01/02/18 12:56		
Haloether 528	ND	ug/L	1.0	1		01/02/18 12:56		
Halomar	ND	ug/L	1.0	1		01/02/18 12:56		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 12:56	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 12:56		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 12:56	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 12:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 12:56	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 12:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 12:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 12:56	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 12:56	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 12:56		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 12:56	79-01-6	

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Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: TB-20171227 **Lab ID: 2067983001** Collected: 12/27/17 00:00 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 12:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 12:56	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 12:56	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 12:56	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 12:56	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 12:56	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/02/18 12:56	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/02/18 12:56	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		01/02/18 12:56	1868-53-7	

Sample: EB-20171227 **Lab ID: 2067983002** Collected: 12/27/17 08:15 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 13:13	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 13:13	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 13:13	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 13:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 13:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 13:13	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 13:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 13:13	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 13:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 13:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 13:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 13:13	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 13:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 13:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 13:13	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 13:13	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 13:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:13	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 13:13	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 13:13	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 406	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 421	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 427	ND	ug/L	1.0	1		01/02/18 13:13		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: EB-20171227 **Lab ID: 2067983002** Collected: 12/27/17 08:15 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 508	ND	ug/L	1.0	1		01/02/18 13:13		
Haloether 528	ND	ug/L	1.0	1		01/02/18 13:13		
Halomar	ND	ug/L	1.0	1		01/02/18 13:13		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 13:13	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 13:13		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 13:13	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 13:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 13:13	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 13:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 13:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 13:13	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 13:13	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 13:13		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 13:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 13:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 13:13	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 13:13	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 13:13	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 13:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 13:13	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%.	79-119	1		01/02/18 13:13	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/02/18 13:13	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		01/02/18 13:13	1868-53-7	

Sample: FB-20171227 **Lab ID: 2067983003** Collected: 12/27/17 09:07 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 13:31	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 13:31	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 13:31	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 13:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 13:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 13:31	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 13:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 13:31	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 13:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 13:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 13:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 13:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 13:31	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FB-20171227 **Lab ID: 2067983003** Collected: 12/27/17 09:07 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/02/18 13:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 13:31	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 13:31	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 13:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:31	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 13:31	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 13:31	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 406	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 421	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 427	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 428	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 508	ND	ug/L	1.0	1		01/02/18 13:31		
Haloether 528	ND	ug/L	1.0	1		01/02/18 13:31		
Halomar	ND	ug/L	1.0	1		01/02/18 13:31		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 13:31	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 13:31		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 13:31	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 13:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 13:31	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 13:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 13:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 13:31	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 13:31	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 13:31		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 13:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 13:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 13:31	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 13:31	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 13:31	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 13:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 13:31	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/02/18 13:31	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/02/18 13:31	460-00-4	
Dibromofluoromethane (S)	109	%.	72-126	1		01/02/18 13:31	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-1BR **Lab ID: 2067983004** Collected: 12/27/17 09:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 12:38	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 12:38	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 12:38	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 12:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 12:38	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 12:38	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 12:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 12:38	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 12:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 12:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 12:38	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 12:38	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 12:38	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 12:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 12:38	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 12:38	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 12:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 12:38	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 12:38	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 12:38	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 406	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 421	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 427	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 428	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 508	ND	ug/L	1.0	1		01/02/18 12:38		
Haloether 528	ND	ug/L	1.0	1		01/02/18 12:38		
Halomar	ND	ug/L	1.0	1		01/02/18 12:38		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 12:38	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 12:38		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 12:38	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 12:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 12:38	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 12:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 12:38	79-34-5	
Tetrachloroethene	**2.5**	ug/L	1.0	1		01/02/18 12:38	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 12:38	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 12:38		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 12:38	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 12:38	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-1BR **Lab ID: 2067983004** Collected: 12/27/17 09:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 12:38	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 12:38	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 12:38	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 12:38	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 12:38	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 12:38	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/02/18 12:38	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/02/18 12:38	460-00-4	
Dibromofluoromethane (S)	109	%.	72-126	1		01/02/18 12:38	1868-53-7	

Sample: MW-3A-2 **Lab ID: 2067983005** Collected: 12/27/17 10:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 13:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 13:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 13:49	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 13:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 13:49	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		01/02/18 13:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 13:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 13:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 13:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 13:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 13:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 13:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 13:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 13:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 13:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 13:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:49	75-35-4	
cis-1,2-Dichloroethene	**34.7**	ug/L	1.0	1		01/02/18 13:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 13:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 13:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 13:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 13:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 13:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 406	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 421	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 427	ND	ug/L	1.0	1		01/02/18 13:49		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-2 **Lab ID: 2067983005** Collected: 12/27/17 10:57 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 508	ND	ug/L	1.0	1		01/02/18 13:49		
Haloether 528	ND	ug/L	1.0	1		01/02/18 13:49		
Halomar	ND	ug/L	1.0	1		01/02/18 13:49		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 13:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 13:49		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 13:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 13:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 13:49	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 13:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 13:49	79-34-5	
Tetrachloroethene	**14.8**	ug/L	1.0	1		01/02/18 13:49	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 13:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 13:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 13:49	79-00-5	
Trichloroethene	**2.2**	ug/L	1.0	1		01/02/18 13:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 13:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 13:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 13:49	76-13-1	
Vinyl chloride	**2.6**	ug/L	1.0	1		01/02/18 13:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 13:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 13:49	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/02/18 13:49	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	68-124	1		01/02/18 13:49	460-00-4	
Dibromofluoromethane (S)	111	%.	72-126	1		01/02/18 13:49	1868-53-7	

Sample: MW-3A-3 **Lab ID: 2067983006** Collected: 12/27/17 11:58 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**6.6**	ug/L	4.0	1		01/02/18 14:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 14:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 14:07	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 14:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 14:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 14:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 14:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 14:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 14:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 14:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 14:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 14:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 14:07	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: MW-3A-3 **Lab ID: 2067983006** Collected: 12/27/17 11:58 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/02/18 14:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 14:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 14:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 14:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 14:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 14:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 406	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 421	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 427	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 428	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 508	ND	ug/L	1.0	1		01/02/18 14:07		
Haloether 528	ND	ug/L	1.0	1		01/02/18 14:07		
Halomar	ND	ug/L	1.0	1		01/02/18 14:07		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 14:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 14:07		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 14:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 14:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 14:07	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 14:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 14:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 14:07	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 14:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 14:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 14:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 14:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 14:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 14:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 14:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 14:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 14:07	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/02/18 14:07	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/02/18 14:07	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/02/18 14:07	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: EB-20171228 **Lab ID: 2067983007** Collected: 12/28/17 07:43 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 14:24	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 14:24	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 14:24	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 14:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 14:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 14:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 14:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 14:24	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 14:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 14:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 14:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 14:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 14:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 14:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 14:24	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 14:24	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 14:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:24	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 14:24	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 14:24	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 406	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 421	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 427	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 428	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 508	ND	ug/L	1.0	1		01/02/18 14:24		
Haloether 528	ND	ug/L	1.0	1		01/02/18 14:24		
Halomar	ND	ug/L	1.0	1		01/02/18 14:24		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 14:24	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 14:24		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 14:24	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 14:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 14:24	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 14:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 14:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 14:24	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 14:24	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 14:24		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 14:24	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: EB-20171228 **Lab ID: 2067983007** Collected: 12/28/17 07:43 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 14:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 14:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 14:24	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 14:24	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 14:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 14:24	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/02/18 14:24	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/02/18 14:24	460-00-4	
Dibromofluoromethane (S)	112	%.	72-126	1		01/02/18 14:24	1868-53-7	

Sample: FB-20171228 **Lab ID: 2067983008** Collected: 12/28/17 08:18 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 14:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 14:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 14:42	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 14:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 14:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 14:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 14:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 14:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 14:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 14:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 14:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 14:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 14:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 14:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 14:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 14:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 14:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 14:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 14:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 14:42	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 406	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 421	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 427	ND	ug/L	1.0	1		01/02/18 14:42		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FB-20171228 **Lab ID: 2067983008** Collected: 12/28/17 08:18 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 508	ND	ug/L	1.0	1		01/02/18 14:42		
Haloether 528	ND	ug/L	1.0	1		01/02/18 14:42		
Halomar	ND	ug/L	1.0	1		01/02/18 14:42		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 14:42	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/02/18 14:42		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 14:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 14:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 14:42	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 14:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 14:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 14:42	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 14:42	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/02/18 14:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 14:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 14:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 14:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 14:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 14:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 14:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 14:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 14:42	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/02/18 14:42	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/02/18 14:42	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/02/18 14:42	1868-53-7	

Sample: FMW-4-20 **Lab ID: 2067983009** Collected: 12/28/17 11:34 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 15:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 15:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 15:00	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 15:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 15:00	75-27-4	
Bromoform	**1.2**	ug/L	1.0	1		01/02/18 15:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 15:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 15:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 15:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 15:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 15:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 15:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 15:00	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FMW-4-20 **Lab ID: 2067983009** Collected: 12/28/17 11:34 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/02/18 15:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 15:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 15:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 15:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 15:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 15:00	100-41-4	
Haloether 229	**14.3**	ug/L	1.0	1		01/02/18 15:00		
Haloether 406	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 421	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 427	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 428	ND	ug/L	1.0	1		01/02/18 15:00		
Haloether 508	**6.3**	ug/L	1.0	1		01/02/18 15:00		
Haloether 528	ND	ug/L	1.0	1		01/02/18 15:00		
Halomar	ND	ug/L	1.0	1		01/02/18 15:00		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 15:00	591-78-6	
Isoflurane	**162**	ug/L	1.0	1		01/02/18 15:00		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 15:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 15:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 15:00	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 15:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 15:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/02/18 15:00	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 15:00	108-88-3	
Total Haloether	**182**	ug/L	1.0	1		01/02/18 15:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 15:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 15:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 15:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 15:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 15:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 15:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 15:00	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%.	79-119	1		01/02/18 15:00	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/02/18 15:00	460-00-4	
Dibromofluoromethane (S)	107	%.	72-126	1		01/02/18 15:00	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FMW-4-90 **Lab ID: 2067983010** Collected: 12/28/17 13:04 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/02/18 15:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/02/18 15:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/02/18 15:18	107-13-1	
Benzene	ND	ug/L	1.0	1		01/02/18 15:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/02/18 15:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/02/18 15:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/02/18 15:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/02/18 15:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/02/18 15:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/02/18 15:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/02/18 15:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/02/18 15:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/02/18 15:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/02/18 15:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/02/18 15:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/02/18 15:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/02/18 15:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/02/18 15:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/02/18 15:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/02/18 15:18	100-41-4	
Haloether 229	**25.3**	ug/L	1.0	1		01/02/18 15:18		
Haloether 406	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 421	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 427	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 428	ND	ug/L	1.0	1		01/02/18 15:18		
Haloether 508	**15.4**	ug/L	1.0	1		01/02/18 15:18		
Haloether 528	ND	ug/L	1.0	1		01/02/18 15:18		
Halomar	ND	ug/L	1.0	1		01/02/18 15:18		
2-Hexanone	ND	ug/L	2.0	1		01/02/18 15:18	591-78-6	
Isoflurane	**198**	ug/L	1.0	1		01/02/18 15:18		
Methoxyflurane	ND	ug/L	1.0	1		01/02/18 15:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/02/18 15:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/02/18 15:18	108-10-1	
Styrene	ND	ug/L	1.0	1		01/02/18 15:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/02/18 15:18	79-34-5	
Tetrachloroethene	**1.0**	ug/L	1.0	1		01/02/18 15:18	127-18-4	
Toluene	ND	ug/L	1.0	1		01/02/18 15:18	108-88-3	
Total Haloether	**238**	ug/L	1.0	1		01/02/18 15:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/02/18 15:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/02/18 15:18	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2067983

Sample: FMW-4-90 **Lab ID: 2067983010** Collected: 12/28/17 13:04 Received: 12/29/17 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/02/18 15:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/02/18 15:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/02/18 15:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/02/18 15:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/02/18 15:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/02/18 15:18	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/02/18 15:18	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/02/18 15:18	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/02/18 15:18	1868-53-7	

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CHAIN-OF-CUSTODY

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WO# : 2067983

2067983

of

1965986

Section A Required Client Information:

Company: Arcadis
Address: #48 City View Plaza, Suite 401
Rd 165 Km 1.2 Guaynabo P.R. 00968
Email To:
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Fiers 25 APR 2017 (PO# 0000191.0005 1102A
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Craig.mccollum@pacelabs.com
Pace Profile #: 1037 L 12

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOC 8260 Trip blank	VOC 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-20171227	WT	G			12/27/17	LAB		2				2					X			
2	EB-20171227	WT	G			12/27/17	0815		3				3						X		
3	FB-20171227	WT	G			12/27/17	0907		3				3						X		
4	MW-3A-1BR	WT	G			12/27/17	0957		3				3						X		
5	MW-3A-2	WT	G			12/27/17	1057		3				3						X		
6	MW-3A-3	WT	G			12/27/17	1158		3				3						X		
7	EB-20171228	WT	G			12/28/17	0743		3				3						X		
8	FB-20171228	WT	G			12/28/17	0818		3				3						X		
9	FMW-4-20	WT	G			12/28/17	1134		3				3						X		
10	FMW-4-90	WT	G			12/28/17	1304		3				3						X		
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colón / Arcadis	12/28/17	1531	[signature] / Pace	12-28-17	15:31				
	Fed Ex 12/29/17	0800		Fed Ex [signature] Pace	12/29/17	0820	0.6	y	y	y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colón

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12/28/17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2068274
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29225R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2068274 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20180103	2068274001	Water	01/03/2018		X				
EB-20180103	2068274002	Water	01/03/2018		X				
FB-20180103	2068274003	Water	01/03/2018		X				
RW-2	2068274004	Water	01/03/2018		X				
RW-4	2068274005	Water	01/03/2018		X				
EB-20180104	2068274006	Water	01/04/2018		X				
FB-20180104	2068274007	Water	01/04/2018		X				
MW-2C-1BR	2068274008	Water	01/04/2018		X				
MW-2C-4	2068274009	Water	01/04/2018		X				
MW-2C-2	2068274010	Water	01/04/2018		X				
MW-2C-5	2068274011	Water	01/04/2018		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-2C-1BR for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, no qualification of the sample results was required.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location within this SDG.

7. System Performance and Overall Assessment

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-2C-2	Isoflurane	-	165 D	165 D
	Total Haloether	-	261 D	261 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: February 2, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
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(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: TB-20180103 **Lab ID: 2068274001** Collected: 01/03/18 00:00 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**4.3**	ug/L	4.0	1		01/08/18 11:57	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 11:57	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 11:57	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 11:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 11:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 11:57	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 11:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 11:57	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 11:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 11:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 11:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 11:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 11:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 11:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 11:57	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 11:57	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 11:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:57	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 11:57	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 11:57	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 406	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 421	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 427	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 428	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 508	ND	ug/L	1.0	1		01/08/18 11:57		
Haloether 528	ND	ug/L	1.0	1		01/08/18 11:57		
Halomar	ND	ug/L	1.0	1		01/08/18 11:57		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 11:57	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 11:57		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 11:57	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 11:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 11:57	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 11:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 11:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 11:57	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 11:57	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 11:57		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 11:57	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: TB-20180103 **Lab ID: 2068274001** Collected: 01/03/18 00:00 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 11:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 11:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 11:57	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 11:57	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 11:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 11:57	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 11:57	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		01/08/18 11:57	460-00-4	
Dibromofluoromethane (S)	110	%.	72-126	1		01/08/18 11:57	1868-53-7	

Sample: EB-20180103 **Lab ID: 2068274002** Collected: 01/03/18 08:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 15:47	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 15:47	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 15:47	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 15:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 15:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 15:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 15:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 15:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 15:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 15:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 15:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 15:47	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 15:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 15:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 15:47	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 15:47	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 15:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:47	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 15:47	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 15:47	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 406	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 421	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 427	ND	ug/L	1.0	1		01/08/18 15:47		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: EB-20180103 **Lab ID: 2068274002** Collected: 01/03/18 08:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 508	ND	ug/L	1.0	1		01/08/18 15:47		
Haloether 528	ND	ug/L	1.0	1		01/08/18 15:47		
Halomar	ND	ug/L	1.0	1		01/08/18 15:47		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 15:47	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 15:47		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 15:47	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 15:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 15:47	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 15:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 15:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 15:47	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 15:47	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 15:47		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 15:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 15:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 15:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 15:47	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 15:47	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 15:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 15:47	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 15:47	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		01/08/18 15:47	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	1		01/08/18 15:47	1868-53-7	

Sample: FB-20180103 **Lab ID: 2068274003** Collected: 01/03/18 10:52 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**8.7**	ug/L	4.0	1		01/08/18 16:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 16:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 16:05	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 16:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 16:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 16:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 16:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 16:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 16:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 16:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 16:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 16:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 16:05	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: FB-20180103 **Lab ID: 2068274003** Collected: 01/03/18 10:52 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/08/18 16:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 16:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 16:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 16:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 16:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 16:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 406	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 421	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 427	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 428	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 508	ND	ug/L	1.0	1		01/08/18 16:05		
Haloether 528	ND	ug/L	1.0	1		01/08/18 16:05		
Halomar	ND	ug/L	1.0	1		01/08/18 16:05		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 16:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 16:05		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 16:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 16:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 16:05	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 16:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 16:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 16:05	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 16:05	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 16:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 16:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 16:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 16:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 16:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 16:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 16:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 16:05	95-47-6	
Surrogates								
Toluene-d8 (S)	96	%.	79-119	1		01/08/18 16:05	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	68-124	1		01/08/18 16:05	460-00-4	
Dibromofluoromethane (S)	106	%.	72-126	1		01/08/18 16:05	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: RW-2 **Lab ID: 2068274004** Collected: 01/03/18 10:58 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 12:50	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 12:50	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 12:50	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 12:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 12:50	75-27-4	
Bromoform	**1.1**	ug/L	1.0	1		01/08/18 12:50	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 12:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 12:50	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 12:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 12:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 12:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 12:50	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 12:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 12:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 12:50	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 12:50	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 12:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 12:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 12:50	10061-02-6	
Enflurane	**1.5**	ug/L	1.0	1		01/08/18 12:50	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 12:50	100-41-4	
Haloether 229	**12.7**	ug/L	1.0	1		01/08/18 12:50		
Haloether 406	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 421	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 427	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 428	ND	ug/L	1.0	1		01/08/18 12:50		
Haloether 508	**33.9**	ug/L	1.0	1		01/08/18 12:50		
Haloether 528	**1.2**	ug/L	1.0	1		01/08/18 12:50		
Halomar	ND	ug/L	1.0	1		01/08/18 12:50		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 12:50	591-78-6	
Isoflurane	**65.2**	ug/L	1.0	1		01/08/18 12:50		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 12:50	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 12:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 12:50	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 12:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 12:50	79-34-5	
Tetrachloroethene	**4.4**	ug/L	1.0	1		01/08/18 12:50	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 12:50	108-88-3	
Total Haloether	**115**	ug/L	1.0	1		01/08/18 12:50		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 12:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 12:50	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: RW-2 **Lab ID: 2068274004** Collected: 01/03/18 10:58 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 12:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 12:50	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 12:50	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 12:50	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 12:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 12:50	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/08/18 12:50	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/08/18 12:50	460-00-4	
Dibromofluoromethane (S)	113	%.	72-126	1		01/08/18 12:50	1868-53-7	

Sample: RW-4 **Lab ID: 2068274005** Collected: 01/03/18 11:26 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 13:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 13:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 13:43	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 13:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 13:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 13:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 13:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 13:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 13:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 13:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 13:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 13:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 13:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 13:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 13:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 13:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 13:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 13:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 13:43	100-41-4	
Haloether 229	**2.9**	ug/L	1.0	1		01/08/18 13:43		
Haloether 406	ND	ug/L	1.0	1		01/08/18 13:43		
Haloether 421	ND	ug/L	1.0	1		01/08/18 13:43		
Haloether 427	ND	ug/L	1.0	1		01/08/18 13:43		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: RW-4 **Lab ID: 2068274005** Collected: 01/03/18 11:26 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/08/18 13:43		
Haloether 508	**31.9**	ug/L	1.0	1		01/08/18 13:43		
Haloether 528	ND	ug/L	1.0	1		01/08/18 13:43		
Halomar	ND	ug/L	1.0	1		01/08/18 13:43		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 13:43	591-78-6	
Isoflurane	**21.5**	ug/L	1.0	1		01/08/18 13:43		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 13:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 13:43	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 13:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 13:43	79-34-5	
Tetrachloroethene	**3.2**	ug/L	1.0	1		01/08/18 13:43	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 13:43	108-88-3	
Total Haloether	**56.3**	ug/L	1.0	1		01/08/18 13:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 13:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 13:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 13:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 13:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 13:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 13:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 13:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 13:43	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/08/18 13:43	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		01/08/18 13:43	460-00-4	
Dibromofluoromethane (S)	115	%.	72-126	1		01/08/18 13:43	1868-53-7	

Sample: EB-20180104 **Lab ID: 2068274006** Collected: 01/04/18 07:50 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**12.6**	ug/L	4.0	1		01/08/18 14:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 14:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 14:01	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 14:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 14:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 14:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 14:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 14:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 14:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 14:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 14:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 14:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 14:01	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: EB-20180104 **Lab ID: 2068274006** Collected: 01/04/18 07:50 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/08/18 14:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 14:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 14:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 14:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 14:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 14:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 406	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 421	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 427	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 428	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 508	ND	ug/L	1.0	1		01/08/18 14:01		
Haloether 528	ND	ug/L	1.0	1		01/08/18 14:01		
Halomar	ND	ug/L	1.0	1		01/08/18 14:01		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 14:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 14:01		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 14:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 14:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 14:01	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 14:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 14:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 14:01	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 14:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 14:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 14:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 14:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 14:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 14:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 14:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 14:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 14:01	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 14:01	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	1		01/08/18 14:01	460-00-4	
Dibromofluoromethane (S)	120	%.	72-126	1		01/08/18 14:01	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: FB-20180104 **Lab ID: 2068274007** Collected: 01/04/18 09:24 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**12.8**	ug/L	4.0	1		01/08/18 14:19	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 14:19	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 14:19	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 14:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 14:19	75-27-4	
Bromoform	**1.0**	ug/L	1.0	1		01/08/18 14:19	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 14:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 14:19	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 14:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 14:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 14:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 14:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 14:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 14:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 14:19	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 14:19	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 14:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:19	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 14:19	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 14:19	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 406	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 421	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 427	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 428	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 508	ND	ug/L	1.0	1		01/08/18 14:19		
Haloether 528	ND	ug/L	1.0	1		01/08/18 14:19		
Halomar	ND	ug/L	1.0	1		01/08/18 14:19		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 14:19	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/08/18 14:19		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 14:19	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 14:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 14:19	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 14:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 14:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 14:19	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 14:19	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/08/18 14:19		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 14:19	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: FB-20180104 **Lab ID: 2068274007** Collected: 01/04/18 09:24 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 14:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 14:19	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 14:19	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 14:19	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 14:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 14:19	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/08/18 14:19	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/08/18 14:19	460-00-4	
Dibromofluoromethane (S)	116	%.	72-126	1		01/08/18 14:19	1868-53-7	

Sample: MW-2C-1BR **Lab ID: 2068274008** Collected: 01/04/18 10:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 11:39	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 11:39	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 11:39	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 11:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 11:39	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 11:39	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 11:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 11:39	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 11:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 11:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 11:39	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 11:39	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 11:39	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 11:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 11:39	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 11:39	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 11:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 11:39	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 11:39	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 11:39	100-41-4	
Haloether 229	**2.0**	ug/L	1.0	1		01/08/18 11:39		
Haloether 406	ND	ug/L	1.0	1		01/08/18 11:39		
Haloether 421	ND	ug/L	1.0	1		01/08/18 11:39		
Haloether 427	ND	ug/L	1.0	1		01/08/18 11:39		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-1BR **Lab ID: 2068274008** Collected: 01/04/18 10:10 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/08/18 11:39		
Haloether 508	**6.4**	ug/L	1.0	1		01/08/18 11:39		
Haloether 528	ND	ug/L	1.0	1		01/08/18 11:39		
Halomar	ND	ug/L	1.0	1		01/08/18 11:39		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 11:39	591-78-6	
Isoflurane	**15.6**	ug/L	1.0	1		01/08/18 11:39		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 11:39	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 11:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 11:39	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 11:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 11:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 11:39	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 11:39	108-88-3	
Total Haloether	**24.0**	ug/L	1.0	1		01/08/18 11:39		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 11:39	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 11:39	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 11:39	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 11:39	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 11:39	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 11:39	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 11:39	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 11:39	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/08/18 11:39	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/08/18 11:39	460-00-4	
Dibromofluoromethane (S)	112	%.	72-126	1		01/08/18 11:39	1868-53-7	

Sample: MW-2C-4 **Lab ID: 2068274009** Collected: 01/04/18 10:38 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 14:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 14:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 14:54	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 14:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 14:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 14:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 14:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 14:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 14:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 14:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 14:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 14:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 14:54	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-4 **Lab ID: 2068274009** Collected: 01/04/18 10:38 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/08/18 14:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 14:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 14:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 14:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 14:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 14:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 14:54	100-41-4	
Haloether 229	**3.5**	ug/L	1.0	1		01/08/18 14:54		
Haloether 406	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 421	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 427	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 428	ND	ug/L	1.0	1		01/08/18 14:54		
Haloether 508	**6.2**	ug/L	1.0	1		01/08/18 14:54		
Haloether 528	ND	ug/L	1.0	1		01/08/18 14:54		
Halomar	ND	ug/L	1.0	1		01/08/18 14:54		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 14:54	591-78-6	
Isoflurane	**18.1**	ug/L	1.0	1		01/08/18 14:54		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 14:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 14:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 14:54	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 14:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 14:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 14:54	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 14:54	108-88-3	
Total Haloether	**27.8**	ug/L	1.0	1		01/08/18 14:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 14:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 14:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 14:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 14:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 14:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 14:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 14:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 14:54	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/08/18 14:54	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	68-124	1		01/08/18 14:54	460-00-4	
Dibromofluoromethane (S)	115	%.	72-126	1		01/08/18 14:54	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-2 **Lab ID: 2068274010** Collected: 01/04/18 11:33 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 15:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 15:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 15:12	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 15:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 15:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 15:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 15:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 15:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 15:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 15:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 15:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 15:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 15:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 15:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 15:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 15:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 15:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 15:12	10061-02-6	
Enflurane	**1.7**	ug/L	1.0	1		01/08/18 15:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 15:12	100-41-4	
Haloether 229	**42.8**	ug/L	1.0	1		01/08/18 15:12		
Haloether 406	**1.7**	ug/L	1.0	1		01/08/18 15:12		
Haloether 421	ND	ug/L	1.0	1		01/08/18 15:12		
Haloether 427	ND	ug/L	1.0	1		01/08/18 15:12		
Haloether 428	ND	ug/L	1.0	1		01/08/18 15:12		
Haloether 508	**49.6**	ug/L	1.0	1		01/08/18 15:12		
Haloether 528	ND	ug/L	1.0	1		01/08/18 15:12		
Halomar	ND	ug/L	1.0	1		01/08/18 15:12		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 15:12	591-78-6	
Isoflurane	**165**	ug/L	5.0	5		01/08/18 16:24		D
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 15:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 15:12	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 15:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 15:12	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		01/08/18 15:12	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 15:12	108-88-3	
Total Haloether	**261**	ug/L	5.0	5		01/08/18 16:24		D
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 15:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 15:12	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-2 **Lab ID: 2068274010** Collected: 01/04/18 11:33 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 15:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 15:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 15:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 15:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 15:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 15:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/08/18 15:12	2037-26-5	
Toluene-d8 (S)	98	%.	79-119	5		01/08/18 16:24	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	68-124	5		01/08/18 16:24	460-00-4	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/08/18 15:12	460-00-4	
Dibromofluoromethane (S)	108	%.	72-126	5		01/08/18 16:24	1868-53-7	
Dibromofluoromethane (S)	115	%.	72-126	1		01/08/18 15:12	1868-53-7	

Sample: MW-2C-5 **Lab ID: 2068274011** Collected: 01/04/18 12:19 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/08/18 16:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/08/18 16:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/08/18 16:42	107-13-1	
Benzene	ND	ug/L	1.0	1		01/08/18 16:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/18 16:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/18 16:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/08/18 16:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/08/18 16:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/08/18 16:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/18 16:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/18 16:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/18 16:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/08/18 16:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/18 16:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/18 16:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/08/18 16:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/18 16:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/18 16:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/08/18 16:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/08/18 16:42	100-41-4	
Haloether 229	**5.3**	ug/L	1.0	1		01/08/18 16:42		

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068274

Sample: MW-2C-5 **Lab ID: 2068274011** Collected: 01/04/18 12:19 Received: 01/05/18 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 406	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 421	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 427	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 428	ND	ug/L	1.0	1		01/08/18 16:42		
Haloether 508	**4.5**	ug/L	1.0	1		01/08/18 16:42		
Haloether 528	ND	ug/L	1.0	1		01/08/18 16:42		
Halomar	ND	ug/L	1.0	1		01/08/18 16:42		
2-Hexanone	ND	ug/L	2.0	1		01/08/18 16:42	591-78-6	
Isoflurane	**25.5**	ug/L	1.0	1		01/08/18 16:42		
Methoxyflurane	ND	ug/L	1.0	1		01/08/18 16:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/08/18 16:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/08/18 16:42	108-10-1	
Styrene	ND	ug/L	1.0	1		01/08/18 16:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/18 16:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/08/18 16:42	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/18 16:42	108-88-3	
Total Haloether	**35.2**	ug/L	1.0	1		01/08/18 16:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/18 16:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/18 16:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/18 16:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/18 16:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/08/18 16:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/08/18 16:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/08/18 16:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/18 16:42	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/08/18 16:42	2037-26-5	
4-Bromofluorobenzene (S)	110	%.	68-124	1		01/08/18 16:42	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/08/18 16:42	1868-53-7	

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CHAIN-OF-CUSTODY / WO# : 2068274

The Chain-of-Custody is a LEGAL DOCUM

2068274

1 of 1

1947862

Section A Required Client Information:

Company: Arcadis
Address: #48 City View Plaza Suite 401
Rd 165 Km 1.2 Guaynabo P.R 00968
Email To:
Phone: Fax:
Requested Due Date/TAT: Std

Section B Required Project Information:

Report To: Elvin Varela
Copy To:
Purchase Order No.:
Project Name: Fibers 25APR2017 (P.O.# 6000191100517084
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: craig.mccolum@pacelabs.com
Pace Profile #: 1037 L12

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: P.R

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): VOC 8260 Trip Blank; VOC 8260

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	VOC 8260 Trip Blank	VOC 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-20180103	WT	G			01/03/18	LAB		2				2					X			
2	EB-20180103	WT	G			01/03/18	0810		3				3						X		
3	FB-20180103	WT	G			01/03/18	1052		3				3						X		
4	RW-2	WT	G			01/03/18	1058		3				3						X		
5	RW-4	WT	G			01/03/18	1120		3				3						X		
6	EB-20180104	WT	G			01/04/18	0750		3				3						X		
7	FB-20180104	WT	G			01/04/18	0924		3				3						X		
8	MW-2C-IBR	WT	G			01/04/18	1010		3				3						X		
9	MW-2C-4	WT	G			01/04/18	1038		3				3						X		
10	MW-2C-2	WT	G			01/04/18	1133		3				3						X		
11	MW-2C-5	WT	G			01/04/18	1219		3				3						X		
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Andrés Colon / Arcadis	01/04/18	1445	[signature]	01/04/18	1445	4/8	Y	N	Y
	Fed Ex	1/5/18	0805	Fed Ex [signature]	1/5/18	0805	0.2	Y	Y	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Andrés Colon
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 01/04/18

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2069066
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29226R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2069066 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20180116	2069066001	Water	01/16/2018		X				
EB-20180116	2069066002	Water	01/16/2018		X				
FB-20180116	2069066003	Water	01/16/2018		X				
MW-4C-1BR	2069066004	Water	01/16/2018		X				
MW-4C-3	2069066005	Water	01/16/2018		X				
RW-3	2069066006	Water	01/16/2018		X				
GWDUP004	2069066007	Water	01/16/2018	RW-3	X				
RW-1	2069066008	Water	01/16/2018		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location RW-1 for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the RL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
RW-1	1,1,2-Trichlorotrifluoroethane	>UL	>UL
	Haloether 229	>UL	AC

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
RW-3/ GWDUP004	Isoflurane	1.1	1.5	AC
	Tetrachloroethene	1.7	1.8	AC

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	Total Haloether	1.1	1.5	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X		X	
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: February 2, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: TB-20180116 **Lab ID: 2069066001** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 13:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 13:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 13:07	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 13:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 13:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 13:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 13:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 13:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 13:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 13:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 13:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 13:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 13:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 13:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 13:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 13:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 13:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 13:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 13:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 406	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 421	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 427	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 428	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 508	ND	ug/L	1.0	1		01/19/18 13:07		
Haloether 528	ND	ug/L	1.0	1		01/19/18 13:07		
Halomar	ND	ug/L	1.0	1		01/19/18 13:07		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 13:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 13:07		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 13:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 13:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 13:07	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 13:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 13:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 13:07	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 13:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 13:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 13:07	79-01-6	

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Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: TB-20180116 **Lab ID: 2069066001** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 13:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 13:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 13:07	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 13:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 13:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 13:07	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/19/18 13:07	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/19/18 13:07	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/19/18 13:07	1868-53-7	

Sample: EB-20180116 **Lab ID: 2069066002** Collected: 01/16/18 08:05 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 13:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 13:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 13:25	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 13:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 13:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 13:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 13:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 13:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 13:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 13:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 13:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 13:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 13:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 13:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 13:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 13:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 13:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 13:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 13:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 406	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 421	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 427	ND	ug/L	1.0	1		01/19/18 13:25		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: EB-20180116 **Lab ID: 2069066002** Collected: 01/16/18 08:05 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 508	ND	ug/L	1.0	1		01/19/18 13:25		
Haloether 528	ND	ug/L	1.0	1		01/19/18 13:25		
Halomar	ND	ug/L	1.0	1		01/19/18 13:25		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 13:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 13:25		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 13:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 13:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 13:25	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 13:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 13:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 13:25	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 13:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 13:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 13:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 13:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 13:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 13:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 13:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 13:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 13:25	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/19/18 13:25	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/19/18 13:25	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/19/18 13:25	1868-53-7	

Sample: FB-20180116 **Lab ID: 2069066003** Collected: 01/16/18 08:50 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 13:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 13:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 13:43	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 13:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 13:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 13:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 13:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 13:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 13:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 13:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 13:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 13:43	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: FB-20180116 **Lab ID: 2069066003** Collected: 01/16/18 08:50 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/19/18 13:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 13:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 13:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 13:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 13:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 13:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 13:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 406	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 421	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 427	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 428	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 508	ND	ug/L	1.0	1		01/19/18 13:43		
Haloether 528	ND	ug/L	1.0	1		01/19/18 13:43		
Halomar	ND	ug/L	1.0	1		01/19/18 13:43		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 13:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 13:43		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 13:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 13:43	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 13:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 13:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 13:43	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 13:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 13:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 13:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 13:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 13:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 13:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 13:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 13:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 13:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 13:43	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/19/18 13:43	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		01/19/18 13:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/19/18 13:43	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: MW-4C-1BR **Lab ID: 2069066004** Collected: 01/16/18 10:09 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:00	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:00	10061-02-6	
Enflurane	**4.1**	ug/L	1.0	1		01/19/18 14:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:00	100-41-4	
Haloether 229	**7.6**	ug/L	1.0	1		01/19/18 14:00		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:00		
Haloether 508	**9.3**	ug/L	1.0	1		01/19/18 14:00		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:00		
Halomar	**1.4**	ug/L	1.0	1		01/19/18 14:00		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:00	591-78-6	
Isoflurane	**97.8**	ug/L	1.0	1		01/19/18 14:00		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:00	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/19/18 14:00	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:00	108-88-3	
Total Haloether	**120**	ug/L	1.0	1		01/19/18 14:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:00	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: MW-4C-1BR **Lab ID: 2069066004** Collected: 01/16/18 10:09 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:00	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/19/18 14:00	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/19/18 14:00	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/19/18 14:00	1868-53-7	

Sample: MW-4C-3 **Lab ID: 2069066005** Collected: 01/16/18 11:14 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:18	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:18	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 14:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:18	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:18		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: MW-4C-3 **Lab ID: 2069066005** Collected: 01/16/18 11:14 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:18		
Haloether 508	**3.1**	ug/L	1.0	1		01/19/18 14:18		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:18		
Halomar	ND	ug/L	1.0	1		01/19/18 14:18		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:18	591-78-6	
Isoflurane	**2.5**	ug/L	1.0	1		01/19/18 14:18		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:18	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:18	79-34-5	
Tetrachloroethene	**1.6**	ug/L	1.0	1		01/19/18 14:18	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:18	108-88-3	
Total Haloether	**5.7**	ug/L	1.0	1		01/19/18 14:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:18	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/19/18 14:18	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/19/18 14:18	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/19/18 14:18	1868-53-7	

Sample: RW-3 **Lab ID: 2069066006** Collected: 01/16/18 11:57 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:36	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:36	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:36	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:36	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: RW-3 **Lab ID: 2069066006** Collected: 01/16/18 11:57 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:36	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:36	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 14:36	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:36	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 508	ND	ug/L	1.0	1		01/19/18 14:36		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:36		
Halomar	ND	ug/L	1.0	1		01/19/18 14:36		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:36	591-78-6	
Isoflurane	**1.1**	ug/L	1.0	1		01/19/18 14:36		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:36	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:36	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:36	79-34-5	
Tetrachloroethene	**1.7**	ug/L	1.0	1		01/19/18 14:36	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:36	108-88-3	
Total Haloether	**1.1**	ug/L	1.0	1		01/19/18 14:36		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:36	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:36	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/19/18 14:36	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/19/18 14:36	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/19/18 14:36	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: GWDUP004 **Lab ID: 2069066007** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 14:54	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 14:54	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 14:54	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 14:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 14:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 14:54	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 14:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 14:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 14:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 14:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 14:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 14:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 14:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 14:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 14:54	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 14:54	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 14:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 14:54	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 14:54	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 14:54	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 406	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 421	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 427	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 428	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 508	ND	ug/L	1.0	1		01/19/18 14:54		
Haloether 528	ND	ug/L	1.0	1		01/19/18 14:54		
Halomar	ND	ug/L	1.0	1		01/19/18 14:54		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 14:54	591-78-6	
Isoflurane	**1.5**	ug/L	1.0	1		01/19/18 14:54		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 14:54	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 14:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 14:54	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 14:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 14:54	79-34-5	
Tetrachloroethene	**1.8**	ug/L	1.0	1		01/19/18 14:54	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 14:54	108-88-3	
Total Haloether	**1.5**	ug/L	1.0	1		01/19/18 14:54		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 14:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 14:54	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: GWDUP004 **Lab ID: 2069066007** Collected: 01/16/18 00:00 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 14:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 14:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 14:54	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 14:54	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 14:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 14:54	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/19/18 14:54	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	68-124	1		01/19/18 14:54	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/19/18 14:54	1868-53-7	

Sample: RW-1 **Lab ID: 2069066008** Collected: 01/16/18 12:18 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/19/18 12:49	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/19/18 12:49	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/19/18 12:49	107-13-1	
Benzene	ND	ug/L	1.0	1		01/19/18 12:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/19/18 12:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/19/18 12:49	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/19/18 12:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/19/18 12:49	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/19/18 12:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/19/18 12:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/19/18 12:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/19/18 12:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/19/18 12:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/19/18 12:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/19/18 12:49	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/19/18 12:49	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/19/18 12:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 12:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/19/18 12:49	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/19/18 12:49	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/19/18 12:49	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/19/18 12:49		~~M1~~
Haloether 406	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 421	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 427	ND	ug/L	1.0	1		01/19/18 12:49		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069066

Sample: RW-1 **Lab ID: 2069066008** Collected: 01/16/18 12:18 Received: 01/18/18 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 508	ND	ug/L	1.0	1		01/19/18 12:49		
Haloether 528	ND	ug/L	1.0	1		01/19/18 12:49		
Halomar	ND	ug/L	1.0	1		01/19/18 12:49		
2-Hexanone	ND	ug/L	2.0	1		01/19/18 12:49	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/19/18 12:49		
Methoxyflurane	ND	ug/L	1.0	1		01/19/18 12:49	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/19/18 12:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/19/18 12:49	108-10-1	
Styrene	ND	ug/L	1.0	1		01/19/18 12:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/19/18 12:49	79-34-5	
Tetrachloroethene	**1.3**	ug/L	1.0	1		01/19/18 12:49	127-18-4	
Toluene	ND	ug/L	1.0	1		01/19/18 12:49	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/19/18 12:49		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/19/18 12:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/19/18 12:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/19/18 12:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/19/18 12:49	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/19/18 12:49	76-13-1	~~M1~~
Vinyl chloride	ND	ug/L	1.0	1		01/19/18 12:49	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/19/18 12:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/19/18 12:49	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/19/18 12:49	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/19/18 12:49	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/19/18 12:49	1868-53-7	

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO# : 2069066

2069066

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
Rd 165 KM 1.2, Guaynabo, PR 00968	
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	TB-20180116	WT	G			01/16/18	LAB		2				2						X		
2	EB-20180116	WT	G			01/16/18	0905		3				3					X			
3	FB-20180116	WT	G			01/16/18	0950		3				3					X			
4	MW-4C-1BR	WT	G			01/16/18	1009		3				3					X			
5	MW-4C-3	WT	G			01/16/18	1114		3				3					X			
6	RW-3	WT	G			01/16/18	1157		3				3					X			
7	GWDUPOD4	WT	G			01/16/18	/		3				3					X			
8	RW-1	WT	G			01/16/18	1218		3				3					X			
9	RW-1 (MS)	WT	G			01/16/18	1218		3				3					X			
10	RW-1 (MSD)	WT	G			01/16/18	1218		3				3					X			
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andres Colom / Arcadis	01/16/18	1456		1-16-18	1456	
		1-16-18	17:00	FedEx			
	FedEx	1/18/18	01225		1/18/18	1225	1.8 4 4 4

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Andrés Colom
SIGNATURE of SAMPLER:	
DATE Signed:	01/16/18

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles and Miscellaneous Analyses

SDG #2068819
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29227R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2068819 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20180108	2068819001	Water	01/08/2018		X				
EB-20180108	2068819002	Water	01/08/2018		X				
FB-20180108	2068819003	Water	01/08/2018		X				
MW-1C-2	2068819004	Water	01/08/2018		X				
MW-1C-3	2068819005	Water	01/08/2018		X				
MW-1C-4	2068819006	Water	01/08/2018		X				
EB-20180109	2068819007	Water	01/09/2018		X				
FB-20180109	2068819008	Water	01/09/2018		X				
USGS-TW-A2	2068819009	Water	01/09/2018		X				
USGS-TW-A1	2068819010	Water	01/09/2018		X				
GWDUP003	2068819011	Water	01/09/2018	USGS-TW-A1	X				
RW-5	2068819012	Water	01/09/2018		X				
EB-20180110	2068819013	Water	01/10/2018		X				
FB-20180110	2068819014	Water	01/10/2018		X				
FMW-6-90	2068819015	Water	01/10/2018		X				
MW-2	2068819016	Water	01/10/2018		X				
MW-4C-2	2068819017	Water	01/10/2018		X				
MW-4C-4	2068819018	Water	01/10/2018		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location RW-5 for VOCs.

2. Miscellaneous analyses include Chloride.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-1C-3	Acetone (EB)	Detected sample results >RL and <BAL	“UB” at detected sample concentration

RL Reporting limit
EB Equipment Blank

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
RW-5	1,1,2-Trichlorotrifluoroethane	>UL	AC

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
USGS-TW-A1 / GWDUP003	Haloether 508	7.4	7.6	2.7%
	Isoflurane	4.5	4.7	AC
	Tetrachloroethene	3.5	3.4	AC
	Trichloroethene	1.1	1.1	AC
	Total Haloether	12.0	12.3	2.5%

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD		X		X	
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) EPA 300.0 (Chloride). Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Chloride by EPA 300.0	Water	28 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the RL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

A MS/MSD was not performed on a sample location associated with this SDG.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

A laboratory duplicate was not performed on a sample location associated with this SDG.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location associated with this SDG.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: Miscellaneous Methods	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)					X
Dilution Factor		X		X	
Moisture Content					X

%RSD – relative standard deviation, %R - percent recovery, RPD - relative percent difference, %D – difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: Joseph C. Houser

DATE: February 5, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: TB-20180108 **Lab ID: 2068819001** Collected: 01/08/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 13:06	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 13:06	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 13:06	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 13:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 13:06	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 13:06	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 13:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 13:06	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 13:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 13:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 13:06	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 13:06	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 13:06	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 13:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 13:06	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 13:06	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 13:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:06	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 13:06	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 13:06	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 406	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 421	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 427	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 428	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 508	ND	ug/L	1.0	1		01/18/18 13:06		
Haloether 528	ND	ug/L	1.0	1		01/18/18 13:06		
Halomar	ND	ug/L	1.0	1		01/18/18 13:06		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 13:06	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 13:06		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 13:06	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 13:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 13:06	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 13:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 13:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 13:06	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 13:06	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 13:06		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 13:06	79-01-6	

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Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: TB-20180108 **Lab ID: 2068819001** Collected: 01/08/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 13:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 13:06	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 13:06	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 13:06	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 13:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 13:06	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/18/18 13:06	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/18/18 13:06	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/18/18 13:06	1868-53-7	

Sample: EB-20180108 **Lab ID: 2068819002** Collected: 01/08/18 08:40 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.5**	ug/L	4.0	1		01/18/18 13:24	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 13:24	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 13:24	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 13:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 13:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 13:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 13:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 13:24	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 13:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 13:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 13:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 13:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 13:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 13:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 13:24	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 13:24	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 13:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:24	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 13:24	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 13:24	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 406	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 421	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 427	ND	ug/L	1.0	1		01/18/18 13:24		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180108 **Lab ID: 2068819002** Collected: 01/08/18 08:40 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 508	ND	ug/L	1.0	1		01/18/18 13:24		
Haloether 528	ND	ug/L	1.0	1		01/18/18 13:24		
Halomar	ND	ug/L	1.0	1		01/18/18 13:24		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 13:24	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 13:24		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 13:24	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 13:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 13:24	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 13:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 13:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 13:24	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 13:24	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 13:24		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 13:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 13:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 13:24	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 13:24	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 13:24	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 13:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 13:24	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 13:24	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 13:24	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/18/18 13:24	1868-53-7	

Sample: FB-20180108 **Lab ID: 2068819003** Collected: 01/08/18 10:20 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**7.1**	ug/L	4.0	1		01/18/18 13:42	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 13:42	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 13:42	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 13:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 13:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 13:42	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 13:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 13:42	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 13:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 13:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 13:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 13:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 13:42	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FB-20180108 **Lab ID: 2068819003** Collected: 01/08/18 10:20 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 13:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 13:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 13:42	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 13:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 13:42	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 13:42	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 13:42	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 406	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 421	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 427	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 428	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 508	ND	ug/L	1.0	1		01/18/18 13:42		
Haloether 528	ND	ug/L	1.0	1		01/18/18 13:42		
Halomar	ND	ug/L	1.0	1		01/18/18 13:42		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 13:42	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 13:42		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 13:42	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 13:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 13:42	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 13:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 13:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 13:42	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 13:42	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 13:42		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 13:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 13:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 13:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 13:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 13:42	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 13:42	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 13:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 13:42	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/18/18 13:42	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 13:42	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 13:42	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-2 **Lab ID: 2068819004** Collected: 01/08/18 10:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 14:00	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 14:00	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:00	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:00	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:00	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:00	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:00	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:00	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:00	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:00	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:00	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:00		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:00		
Halomar	ND	ug/L	1.0	1		01/18/18 14:00		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:00	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:00		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:00	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:00	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:00	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		01/18/18 14:00	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:00	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:00		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:00	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-2 **Lab ID: 2068819004** Collected: 01/08/18 10:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:00	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:00	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/18/18 14:00	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	68-124	1		01/18/18 14:00	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/18/18 14:00	1868-53-7	

Sample: MW-1C-3 **Lab ID: 2068819005** Collected: 01/08/18 12:04 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**5.7**	ug/L	4.0	1		01/18/18 14:18	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		01/18/18 14:18	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:18	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:18	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:18	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:18	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:18	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:18		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-3 **Lab ID: 2068819005** Collected: 01/08/18 12:04 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:18		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:18		
Halomar	ND	ug/L	1.0	1		01/18/18 14:18		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:18	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:18		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:18	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:18	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:18	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	1		01/18/18 14:18	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:18	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:18		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:18	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:18	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:18	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 14:18	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 14:18	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 14:18	1868-53-7	

Sample: MW-1C-4 **Lab ID: 2068819006** Collected: 01/08/18 12:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 14:35	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 14:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:35	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:35	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-1C-4 **Lab ID: 2068819006** Collected: 01/08/18 12:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:35		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:35		
Halomar	ND	ug/L	1.0	1		01/18/18 14:35		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:35	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:35		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:35	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 14:35	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:35	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:35	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 14:35	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 14:35	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 14:35	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180109 **Lab ID: 2068819007** Collected: 01/09/18 07:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 14:53	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 14:53	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 14:53	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 14:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 14:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 14:53	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 14:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 14:53	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 14:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 14:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 14:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 14:53	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 14:53	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 14:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 14:53	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 14:53	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 14:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 14:53	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 14:53	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 14:53	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 406	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 421	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 427	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 428	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 508	ND	ug/L	1.0	1		01/18/18 14:53		
Haloether 528	ND	ug/L	1.0	1		01/18/18 14:53		
Halomar	ND	ug/L	1.0	1		01/18/18 14:53		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 14:53	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 14:53		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 14:53	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 14:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 14:53	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 14:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 14:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 14:53	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 14:53	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 14:53		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 14:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 14:53	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180109 **Lab ID: 2068819007** Collected: 01/09/18 07:55 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 14:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 14:53	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 14:53	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 14:53	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 14:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 14:53	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 14:53	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 14:53	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/18/18 14:53	1868-53-7	

Sample: FB-20180109 **Lab ID: 2068819008** Collected: 01/09/18 09:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.3**	ug/L	4.0	1		01/18/18 15:11	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 15:11	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 15:11	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 15:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 15:11	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 15:11	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 15:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 15:11	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 15:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 15:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 15:11	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 15:11	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 15:11	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 15:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 15:11	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 15:11	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 15:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:11	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 15:11	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 15:11	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 406	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 421	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 427	ND	ug/L	1.0	1		01/18/18 15:11		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FB-20180109 **Lab ID: 2068819008** Collected: 01/09/18 09:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 508	ND	ug/L	1.0	1		01/18/18 15:11		
Haloether 528	ND	ug/L	1.0	1		01/18/18 15:11		
Halomar	ND	ug/L	1.0	1		01/18/18 15:11		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 15:11	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 15:11		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 15:11	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 15:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 15:11	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 15:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 15:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 15:11	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 15:11	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 15:11		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 15:11	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 15:11	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 15:11	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 15:11	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 15:11	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 15:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 15:11	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/18/18 15:11	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 15:11	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/18/18 15:11	1868-53-7	

Sample: USGS-TW-A2 **Lab ID: 2068819009** Collected: 01/09/18 11:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 15:28	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 15:28	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 15:28	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 15:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 15:28	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 15:28	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 15:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 15:28	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 15:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 15:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 15:28	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 15:28	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 15:28	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: USGS-TW-A2 **Lab ID: 2068819009** Collected: 01/09/18 11:18 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 15:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 15:28	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 15:28	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 15:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:28	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 15:28	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 15:28	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 406	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 421	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 427	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 428	ND	ug/L	1.0	1		01/18/18 15:28		
Haloether 508	**2.7**	ug/L	1.0	1		01/18/18 15:28		
Haloether 528	ND	ug/L	1.0	1		01/18/18 15:28		
Halomar	ND	ug/L	1.0	1		01/18/18 15:28		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 15:28	591-78-6	
Isoflurane	**3.8**	ug/L	1.0	1		01/18/18 15:28		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 15:28	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 15:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 15:28	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 15:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 15:28	79-34-5	
Tetrachloroethene	**1.7**	ug/L	1.0	1		01/18/18 15:28	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 15:28	108-88-3	
Total Haloether	**6.5**	ug/L	1.0	1		01/18/18 15:28		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 15:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 15:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 15:28	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 15:28	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 15:28	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 15:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 15:28	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 15:28	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 15:28	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/18/18 15:28	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: USGS-TW-A1 **Lab ID: 2068819010** Collected: 01/09/18 12:54 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 15:46	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 15:46	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 15:46	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 15:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 15:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 15:46	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 15:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 15:46	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 15:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 15:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 15:46	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 15:46	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 15:46	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 15:46	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 15:46	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 15:46	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 15:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 15:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 15:46	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 15:46	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 15:46	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 406	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 421	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 427	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 428	ND	ug/L	1.0	1		01/18/18 15:46		
Haloether 508	**7.4**	ug/L	1.0	1		01/18/18 15:46		
Haloether 528	ND	ug/L	1.0	1		01/18/18 15:46		
Halomar	ND	ug/L	1.0	1		01/18/18 15:46		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 15:46	591-78-6	
Isoflurane	**4.5**	ug/L	1.0	1		01/18/18 15:46		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 15:46	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 15:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 15:46	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 15:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 15:46	79-34-5	
Tetrachloroethene	**3.5**	ug/L	1.0	1		01/18/18 15:46	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 15:46	108-88-3	
Total Haloether	**12.0**	ug/L	1.0	1		01/18/18 15:46		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 15:46	79-00-5	
Trichloroethene	**1.1**	ug/L	1.0	1		01/18/18 15:46	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: USGS-TW-A1 **Lab ID: 2068819010** Collected: 01/09/18 12:54 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 15:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 15:46	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 15:46	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 15:46	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 15:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 15:46	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/18/18 15:46	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/18/18 15:46	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 15:46	1868-53-7	

Sample: GWDUP003 **Lab ID: 2068819011** Collected: 01/09/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:04	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:04	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:04	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:04	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:04	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:04	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:04	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:04	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:04	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:04	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 16:04	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:04	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:04		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: GWDUP003 **Lab ID: 2068819011** Collected: 01/09/18 00:00 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:04		
Haloether 508	**7.6**	ug/L	1.0	1		01/18/18 16:04		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:04		
Halomar	ND	ug/L	1.0	1		01/18/18 16:04		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:04	591-78-6	
Isoflurane	**4.7**	ug/L	1.0	1		01/18/18 16:04		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:04	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:04	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:04	79-34-5	
Tetrachloroethene	**3.4**	ug/L	1.0	1		01/18/18 16:04	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:04	108-88-3	
Total Haloether	**12.3**	ug/L	1.0	1		01/18/18 16:04		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:04	79-00-5	
Trichloroethene	**1.1**	ug/L	1.0	1		01/18/18 16:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:04	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:04	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:04	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 16:04	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/18/18 16:04	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 16:04	1868-53-7	

Sample: RW-5 **Lab ID: 2068819012** Collected: 01/09/18 13:24 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 12:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 12:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 12:48	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 12:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 12:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 12:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 12:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 12:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 12:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 12:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 12:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 12:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 12:48	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: RW-5 **Lab ID: 2068819012** Collected: 01/09/18 13:24 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 12:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 12:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 12:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 12:48	75-35-4	
cis-1,2-Dichloroethene	**1.4**	ug/L	1.0	1		01/18/18 12:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 12:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 12:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 12:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 12:48	10061-02-6	
Enflurane	**2.5**	ug/L	1.0	1		01/18/18 12:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 12:48	100-41-4	
Haloether 229	**8.3**	ug/L	1.0	1		01/18/18 12:48		
Haloether 406	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 421	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 427	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 428	ND	ug/L	1.0	1		01/18/18 12:48		
Haloether 508	**58.3**	ug/L	1.0	1		01/18/18 12:48		
Haloether 528	ND	ug/L	1.0	1		01/18/18 12:48		
Halomar	**1.4**	ug/L	1.0	1		01/18/18 12:48		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 12:48	591-78-6	
Isoflurane	**32.8**	ug/L	1.0	1		01/18/18 12:48		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 12:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 12:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 12:48	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 12:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 12:48	79-34-5	
Tetrachloroethene	**16.8**	ug/L	1.0	1		01/18/18 12:48	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 12:48	108-88-3	
Total Haloether	**103**	ug/L	1.0	1		01/18/18 12:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 12:48	79-00-5	
Trichloroethene	**1.0**	ug/L	1.0	1		01/18/18 12:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 12:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 12:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 12:48	76-13-1	~~M1~~
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 12:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 12:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 12:48	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/18/18 12:48	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/18/18 12:48	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 12:48	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180110 **Lab ID: 2068819013** Collected: 01/10/18 07:45 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 17:15	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 17:15	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 17:15	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 17:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 17:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 17:15	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 17:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 17:15	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 17:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 17:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 17:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 17:15	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 17:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 17:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 17:15	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 17:15	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 17:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:15	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 17:15	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 17:15	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 406	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 421	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 427	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 428	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 508	ND	ug/L	1.0	1		01/18/18 17:15		
Haloether 528	ND	ug/L	1.0	1		01/18/18 17:15		
Halomar	ND	ug/L	1.0	1		01/18/18 17:15		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 17:15	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 17:15		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 17:15	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 17:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 17:15	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 17:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 17:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 17:15	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 17:15	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 17:15		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 17:15	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: EB-20180110 **Lab ID: 2068819013** Collected: 01/10/18 07:45 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 17:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 17:15	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 17:15	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 17:15	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 17:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 17:15	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 17:15	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	68-124	1		01/18/18 17:15	460-00-4	
Dibromofluoromethane (S)	105	%.	72-126	1		01/18/18 17:15	1868-53-7	

Sample: FB-20180110 **Lab ID: 2068819014** Collected: 01/10/18 09:13 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 17:33	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 17:33	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 17:33	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 17:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 17:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 17:33	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 17:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 17:33	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 17:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 17:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 17:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 17:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 17:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 17:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 17:33	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 17:33	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 17:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 17:33	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 17:33	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 17:33	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 406	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 421	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 427	ND	ug/L	1.0	1		01/18/18 17:33		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FB-20180110 **Lab ID: 2068819014** Collected: 01/10/18 09:13 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 508	ND	ug/L	1.0	1		01/18/18 17:33		
Haloether 528	ND	ug/L	1.0	1		01/18/18 17:33		
Halomar	ND	ug/L	1.0	1		01/18/18 17:33		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 17:33	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 17:33		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 17:33	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 17:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 17:33	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 17:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 17:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 17:33	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 17:33	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 17:33		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 17:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 17:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 17:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 17:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 17:33	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 17:33	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 17:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 17:33	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/18/18 17:33	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 17:33	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/18/18 17:33	1868-53-7	

Sample: FMW-6-90 **Lab ID: 2068819015** Collected: 01/10/18 10:30 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:22	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:22	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:22	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:22	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:22	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: FMW-6-90 **Lab ID: 2068819015** Collected: 01/10/18 10:30 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:22	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:22	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:22	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 16:22	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:22	100-41-4	
Haloether 229	**2.2**	ug/L	1.0	1		01/18/18 16:22		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:22		
Haloether 508	**4.1**	ug/L	1.0	1		01/18/18 16:22		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:22		
Halomar	ND	ug/L	1.0	1		01/18/18 16:22		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:22	591-78-6	
Isoflurane	**10.6**	ug/L	1.0	1		01/18/18 16:22		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:22	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:22	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 16:22	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:22	108-88-3	
Total Haloether	**16.8**	ug/L	1.0	1		01/18/18 16:22		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 16:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:22	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:22	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:22	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 16:22	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/18/18 16:22	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/18/18 16:22	1868-53-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	**73.2**	mg/L	5.0	5		01/25/18 01:13	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-2 **Lab ID: 2068819016** Collected: 01/10/18 11:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:40	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:40	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:40	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:40	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:40	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:40	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:40	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:40	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 16:40	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:40	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:40		
Haloether 508	**6.6**	ug/L	1.0	1		01/18/18 16:40		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:40		
Halomar	ND	ug/L	1.0	1		01/18/18 16:40		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:40	591-78-6	
Isoflurane	**2.8**	ug/L	1.0	1		01/18/18 16:40		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:40	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:40	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/18/18 16:40	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:40	108-88-3	
Total Haloether	**9.4**	ug/L	1.0	1		01/18/18 16:40		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 16:40	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-2 **Lab ID: 2068819016** Collected: 01/10/18 11:26 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:40	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:40	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:40	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:40	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 16:40	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 16:40	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/18/18 16:40	1868-53-7	

Sample: MW-4C-2 **Lab ID: 2068819017** Collected: 01/10/18 12:28 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 16:58	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 16:58	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 16:58	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 16:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 16:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 16:58	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 16:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 16:58	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 16:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 16:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 16:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 16:58	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 16:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/18/18 16:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 16:58	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 16:58	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 16:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 16:58	10061-02-6	
Enflurane	**3.8**	ug/L	1.0	1		01/18/18 16:58	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 16:58	100-41-4	
Haloether 229	**4.2**	ug/L	1.0	1		01/18/18 16:58		
Haloether 406	ND	ug/L	1.0	1		01/18/18 16:58		
Haloether 421	ND	ug/L	1.0	1		01/18/18 16:58		
Haloether 427	ND	ug/L	1.0	1		01/18/18 16:58		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-4C-2 **Lab ID: 2068819017** Collected: 01/10/18 12:28 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/18/18 16:58		
Haloether 508	**16.7**	ug/L	1.0	1		01/18/18 16:58		
Haloether 528	ND	ug/L	1.0	1		01/18/18 16:58		
Halomar	**1.3**	ug/L	1.0	1		01/18/18 16:58		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 16:58	591-78-6	
Isoflurane	**28.0**	ug/L	1.0	1		01/18/18 16:58		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 16:58	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 16:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 16:58	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 16:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 16:58	79-34-5	
Tetrachloroethene	**2.0**	ug/L	1.0	1		01/18/18 16:58	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 16:58	108-88-3	
Total Haloether	**54.0**	ug/L	1.0	1		01/18/18 16:58		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 16:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 16:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 16:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 16:58	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 16:58	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 16:58	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 16:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 16:58	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 16:58	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 16:58	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 16:58	1868-53-7	

Sample: MW-4C-4 **Lab ID: 2068819018** Collected: 01/10/18 13:11 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/18/18 18:44	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/18/18 18:44	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/18/18 18:44	107-13-1	
Benzene	ND	ug/L	1.0	1		01/18/18 18:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/18/18 18:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/18/18 18:44	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/18/18 18:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/18/18 18:44	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/18/18 18:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/18/18 18:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/18/18 18:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/18/18 18:44	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/18/18 18:44	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2068819

Sample: MW-4C-4 **Lab ID: 2068819018** Collected: 01/10/18 13:11 Received: 01/13/18 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/18/18 18:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/18/18 18:44	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/18/18 18:44	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/18/18 18:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 18:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/18/18 18:44	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/18/18 18:44	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/18/18 18:44	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 406	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 421	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 427	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 428	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 508	ND	ug/L	1.0	1		01/18/18 18:44		
Haloether 528	ND	ug/L	1.0	1		01/18/18 18:44		
Halomar	ND	ug/L	1.0	1		01/18/18 18:44		
2-Hexanone	ND	ug/L	2.0	1		01/18/18 18:44	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/18/18 18:44		
Methoxyflurane	ND	ug/L	1.0	1		01/18/18 18:44	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/18/18 18:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/18/18 18:44	108-10-1	
Styrene	ND	ug/L	1.0	1		01/18/18 18:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/18/18 18:44	79-34-5	
Tetrachloroethene	**1.7**	ug/L	1.0	1		01/18/18 18:44	127-18-4	
Toluene	ND	ug/L	1.0	1		01/18/18 18:44	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/18/18 18:44		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/18/18 18:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/18/18 18:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/18/18 18:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/18/18 18:44	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/18/18 18:44	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/18/18 18:44	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/18/18 18:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/18/18 18:44	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/18/18 18:44	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/18/18 18:44	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/18/18 18:44	1868-53-7	

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WO# : 2068819

2068819

Page : 1 Of 2

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location: PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	TB-20180108	WT	G			01/08/18	LAB		2				2							X		
2	EB-20180108	WT	G			01/08/18	0840		3				3						X			
3	FB-20180108	WT	G			01/08/18	1020		3				3						X			
4	MW-1C-2	WT	G			01/08/18	1026		3				3						X			
5	MW-1C-3	WT	G			01/08/18	1204		3				3						X			
6	MW-1C-4	WT	G			01/08/18	1255		3				3						X			
7	EB-20180109	WT	G			01/09/18	0955		3				3						X			
8	FB-20180109	WT	G			01/09/18	0918		3				3						X			
9	USGS-TW-A2	WT	G			01/09/18	1118		3				3						X			
10	USGS-TW-A1	WT	G			01/09/18	1254		3				3						X			
11	DUP003	WT	G			01/09/18			3				3						X			
12	RW-5	WT	G			01/09/18	1324		3				3						X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	01/10/18	1614	[signature] / Pace	1-10-18	16:14	
				FedEx			
	FedEx	1/13/18	840	[signature] / Pace	1/13/18	840	1.9 1.4 1.2

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Andrés Colon
SIGNATURE of SAMPLER:	[signature]
DATE Signed:	01 / 10 / 18

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	Y	Y

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency:

State / Location: PR

Requested Analysis Filtered (Y/N):

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	DI H2O	Chloride	Residual Chlorine (Y/N)
1	RW-5 (MS)	WT	G			01/09/18	1324		3				3					X				
2	RW-5 (MSD)	WT	G			01/09/18	1324		3				3					X				
3	EB-20180110	WT	G			01/10/18	0945		3				3					X				
4	FB-20180110	WT	G			01/10/18	0913		3				3					X				
5	FMW-6-90	WT	G			01/10/18	1030		4	1			3					X			X	
6	MW-2	WT	G			01/10/18	1126		3				3					X				
7	MW-4C-2	WT	G			01/10/18	1228		3				3					X				
8	MW-4C-4	WT	G			01/10/18	1311		3				3					X				
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Andrés Colon / Arcadis	01/10/18	1614	[signature] / Pace	1-10-18	16:14	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrés Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 01/10/18

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Fibers Group

Data Review

GUAYAMA, PUERTO RICO

Volatiles Analyses

SDG #2069189
Analyses Performed By:
Pace Analytical Services, Inc.
New Orleans, Louisiana

Report: #29228R
Review Level: Tier II
Project: CO001911.0005.1702A

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #2069189 for samples collected in association with the Fibers Group Site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	TPH	MET	MISC
TB-20180111	2069189001	Water	01/11/2018		X				
EB-20180111	2069189002	Water	01/11/2018		X				
FB-20180111	2069189003	Water	01/11/2018		X				
MW-1B-3	2069189004	Water	01/11/2018		X				
MW-1B-2	2069189005	Water	01/11/2018		X				
PCMW-1	2069189006	Water	01/11/2018		X				
ES-19	2069189007	Water	01/11/2018		X				
AWPI-MW-1	2069189008	Water	01/11/2018		X				
AWPI-MW-2	2069189009	Water	01/11/2018		X				
EB-20180112	2069189010	Water	01/12/2018		X				
FB-20180112	2069189011	Water	01/12/2018		X				
MW-4D-1BR	2069189012	Water	01/12/2018		X				
MW-4D-4	2069189013	Water	01/12/2018		X				
MW-4D-2	2069189014	Water	01/12/2018		X				
MW-4D-3	2069189015	Water	01/12/2018		X				

Note:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-1B-3 for VOCs.

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within acceptable holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the RL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
AWPI-MW-2	Acetone (EB)	Detected sample results >RL and <BAL	“UB” at detected sample concentration

RL Reporting limit
EB Equipment Blank

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-1B-3	1,1,2-Trichlorotrifluoroethane	>UL	>UL

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not performed on a sample location associated with this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks		X	X		
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision RPD		X		X	
Field/Laboratory Duplicate Sample RPD					X
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content					X

%R Percent recovery
RPD Relative percent difference
%RSD Relative standard deviation
%D Percent difference

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: _____

DATE: February 5, 2018

PEER REVIEW: Dennis Capria

DATE: February 14, 2018

CHAIN OF CUSTODY/
ANNOTATED SAMPLE ANALYSIS DATA SHEETS

Pace Analytical Services, LLC
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: TB-20180111 **Lab ID: 2069189001** Collected: 01/11/18 00:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 16:25	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 16:25	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 16:25	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 16:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 16:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 16:25	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 16:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 16:25	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 16:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 16:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 16:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 16:25	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 16:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 16:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 16:25	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 16:25	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 16:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:25	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 16:25	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 16:25	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 406	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 421	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 427	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 428	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 508	ND	ug/L	1.0	1		01/23/18 16:25		
Haloether 528	ND	ug/L	1.0	1		01/23/18 16:25		
Halomar	ND	ug/L	1.0	1		01/23/18 16:25		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 16:25	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 16:25		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 16:25	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 16:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 16:25	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 16:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 16:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 16:25	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 16:25	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 16:25		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 16:25	79-01-6	

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: TB-20180111 **Lab ID: 2069189001** Collected: 01/11/18 00:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 16:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 16:25	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 16:25	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 16:25	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 16:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 16:25	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 16:25	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/23/18 16:25	460-00-4	
Dibromofluoromethane (S)	104	%.	72-126	1		01/23/18 16:25	1868-53-7	

Sample: EB-20180111 **Lab ID: 2069189002** Collected: 01/11/18 08:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**11.3**	ug/L	4.0	1		01/23/18 16:43	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 16:43	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 16:43	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 16:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 16:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 16:43	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 16:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 16:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 16:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 16:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 16:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 16:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 16:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 16:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 16:43	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 16:43	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 16:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:43	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 16:43	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 16:43	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 406	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 421	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 427	ND	ug/L	1.0	1		01/23/18 16:43		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: EB-20180111 **Lab ID: 2069189002** Collected: 01/11/18 08:00 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 508	ND	ug/L	1.0	1		01/23/18 16:43		
Haloether 528	ND	ug/L	1.0	1		01/23/18 16:43		
Halomar	ND	ug/L	1.0	1		01/23/18 16:43		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 16:43	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 16:43		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 16:43	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 16:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 16:43	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 16:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 16:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 16:43	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 16:43	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 16:43		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 16:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 16:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 16:43	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 16:43	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 16:43	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 16:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 16:43	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/23/18 16:43	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		01/23/18 16:43	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 16:43	1868-53-7	

Sample: FB-20180111 **Lab ID: 2069189003** Collected: 01/11/18 10:25 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 17:01	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 17:01	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 17:01	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 17:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 17:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 17:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 17:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 17:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 17:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 17:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 17:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 17:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 17:01	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: FB-20180111 **Lab ID: 2069189003** Collected: 01/11/18 10:25 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 17:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 17:01	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 17:01	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 17:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 17:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 17:01	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 17:01	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 17:01	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 406	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 421	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 427	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 428	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 508	ND	ug/L	1.0	1		01/23/18 17:01		
Haloether 528	ND	ug/L	1.0	1		01/23/18 17:01		
Halomar	ND	ug/L	1.0	1		01/23/18 17:01		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 17:01	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 17:01		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 17:01	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 17:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 17:01	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 17:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 17:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 17:01	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 17:01	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 17:01		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 17:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 17:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 17:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 17:01	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 17:01	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 17:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 17:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 17:01	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/23/18 17:01	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 17:01	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/23/18 17:01	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-1B-3 **Lab ID: 2069189004** Collected: 01/11/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 16:07	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 16:07	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 16:07	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 16:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 16:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 16:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 16:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 16:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 16:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 16:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 16:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 16:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 16:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 16:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 16:07	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 16:07	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 16:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 16:07	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 16:07	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 16:07	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 406	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 421	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 427	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 428	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 508	ND	ug/L	1.0	1		01/23/18 16:07		
Haloether 528	ND	ug/L	1.0	1		01/23/18 16:07		
Halomar	ND	ug/L	1.0	1		01/23/18 16:07		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 16:07	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 16:07		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 16:07	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 16:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 16:07	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 16:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 16:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 16:07	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 16:07	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 16:07		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 16:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 16:07	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-1B-3 **Lab ID: 2069189004** Collected: 01/11/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 16:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 16:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 16:07	76-13-1	~~M1~~
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 16:07	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 16:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 16:07	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 16:07	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	68-124	1		01/23/18 16:07	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/23/18 16:07	1868-53-7	

Sample: MW-1B-2 **Lab ID: 2069189005** Collected: 01/11/18 11:29 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 18:12	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 18:12	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 18:12	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 18:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 18:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 18:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 18:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 18:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 18:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 18:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 18:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 18:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 18:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 18:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 18:12	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 18:12	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 18:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:12	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 18:12	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 18:12	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 406	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 421	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 427	ND	ug/L	1.0	1		01/23/18 18:12		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-1B-2 **Lab ID: 2069189005** Collected: 01/11/18 11:29 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 508	ND	ug/L	1.0	1		01/23/18 18:12		
Haloether 528	ND	ug/L	1.0	1		01/23/18 18:12		
Halomar	ND	ug/L	1.0	1		01/23/18 18:12		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 18:12	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 18:12		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 18:12	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 18:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 18:12	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 18:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 18:12	79-34-5	
Tetrachloroethene	**1.3**	ug/L	1.0	1		01/23/18 18:12	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 18:12	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 18:12		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 18:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 18:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 18:12	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 18:12	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 18:12	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 18:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 18:12	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 18:12	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/23/18 18:12	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/23/18 18:12	1868-53-7	

Sample: PCMW-1 **Lab ID: 2069189006** Collected: 01/11/18 12:19 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 18:30	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 18:30	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 18:30	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 18:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 18:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 18:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 18:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 18:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 18:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 18:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 18:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 18:30	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 18:30	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: PCMW-1 **Lab ID: 2069189006** Collected: 01/11/18 12:19 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 18:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 18:30	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 18:30	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:30	75-35-4	
cis-1,2-Dichloroethene	**4.2**	ug/L	1.0	1		01/23/18 18:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 18:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:30	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 18:30	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 18:30	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 406	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 421	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 427	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 428	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 508	ND	ug/L	1.0	1		01/23/18 18:30		
Haloether 528	ND	ug/L	1.0	1		01/23/18 18:30		
Halomar	ND	ug/L	1.0	1		01/23/18 18:30		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 18:30	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 18:30		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 18:30	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 18:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 18:30	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 18:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 18:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 18:30	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 18:30	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 18:30		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 18:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 18:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 18:30	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 18:30	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 18:30	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 18:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 18:30	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 18:30	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 18:30	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 18:30	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: ES-19 **Lab ID: 2069189007** Collected: 01/11/18 13:10 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 18:48	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 18:48	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 18:48	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 18:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 18:48	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 18:48	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 18:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 18:48	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 18:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 18:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 18:48	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 18:48	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 18:48	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 18:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 18:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 18:48	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 18:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 18:48	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 18:48	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 18:48	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 406	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 421	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 427	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 428	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 508	ND	ug/L	1.0	1		01/23/18 18:48		
Haloether 528	ND	ug/L	1.0	1		01/23/18 18:48		
Halomar	ND	ug/L	1.0	1		01/23/18 18:48		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 18:48	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 18:48		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 18:48	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 18:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 18:48	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 18:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 18:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 18:48	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 18:48	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 18:48		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 18:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 18:48	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: ES-19 **Lab ID: 2069189007** Collected: 01/11/18 13:10 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 18:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 18:48	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 18:48	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 18:48	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 18:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 18:48	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 18:48	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	68-124	1		01/23/18 18:48	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/23/18 18:48	1868-53-7	

Sample: AWPI-MW-1 **Lab ID: 2069189008** Collected: 01/11/18 13:58 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 19:05	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 19:05	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:05	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:05	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:05	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:05	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:05	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:05	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:05	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:05	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:05	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:05		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: AWPI-MW-1 **Lab ID: 2069189008** Collected: 01/11/18 13:58 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:05		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:05		
Halomar	ND	ug/L	1.0	1		01/23/18 19:05		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:05	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:05		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:05	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:05	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:05	79-34-5	
Tetrachloroethene	**3.1**	ug/L	1.0	1		01/23/18 19:05	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:05	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:05		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:05	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:05	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:05	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:05	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 19:05	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/23/18 19:05	460-00-4	
Dibromofluoromethane (S)	100	%.	72-126	1		01/23/18 19:05	1868-53-7	

Sample: AWPI-MW-2 **Lab ID: 2069189009** Collected: 01/11/18 14:35 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	**9.7**	ug/L	4.0	1		01/23/18 19:23	67-64-1	UB
Acrolein	ND	ug/L	8.0	1		01/23/18 19:23	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:23	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:23	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:23	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:23	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:23	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:23	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:23	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: AWPI-MW-2 **Lab ID: 2069189009** Collected: 01/11/18 14:35 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:23	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:23	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:23	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:23	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:23	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:23		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:23		
Halomar	ND	ug/L	1.0	1		01/23/18 19:23		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:23	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:23		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:23	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:23	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:23	79-34-5	
Tetrachloroethene	**5.8**	ug/L	1.0	1		01/23/18 19:23	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:23	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:23		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:23	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:23	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:23	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:23	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:23	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 19:23	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/23/18 19:23	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 19:23	1868-53-7	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: EB-20180112 **Lab ID: 2069189010** Collected: 01/12/18 08:20 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 19:41	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 19:41	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:41	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:41	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:41	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:41	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:41	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:41	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:41	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:41	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:41	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:41	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:41		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:41		
Halomar	ND	ug/L	1.0	1		01/23/18 19:41		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:41	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:41		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:41	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:41	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 19:41	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:41	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:41		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:41	79-01-6	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: EB-20180112 **Lab ID: 2069189010** Collected: 01/12/18 08:20 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:41	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:41	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:41	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:41	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 19:41	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	68-124	1		01/23/18 19:41	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 19:41	1868-53-7	

Sample: FB-20180112 **Lab ID: 2069189011** Collected: 01/12/18 09:30 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 19:59	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 19:59	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 19:59	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 19:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 19:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 19:59	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 19:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 19:59	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 19:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 19:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 19:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 19:59	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 19:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 19:59	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 19:59	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 19:59	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 19:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 19:59	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 19:59	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 19:59	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 406	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 421	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 427	ND	ug/L	1.0	1		01/23/18 19:59		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: FB-20180112 **Lab ID: 2069189011** Collected: 01/12/18 09:30 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 508	ND	ug/L	1.0	1		01/23/18 19:59		
Haloether 528	ND	ug/L	1.0	1		01/23/18 19:59		
Halomar	ND	ug/L	1.0	1		01/23/18 19:59		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 19:59	591-78-6	
Isoflurane	ND	ug/L	1.0	1		01/23/18 19:59		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 19:59	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 19:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 19:59	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 19:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 19:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 19:59	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 19:59	108-88-3	
Total Haloether	ND	ug/L	1.0	1		01/23/18 19:59		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 19:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 19:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 19:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 19:59	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 19:59	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 19:59	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 19:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 19:59	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%.	79-119	1		01/23/18 19:59	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 19:59	460-00-4	
Dibromofluoromethane (S)	102	%.	72-126	1		01/23/18 19:59	1868-53-7	

Sample: MW-4D-1BR **Lab ID: 2069189012** Collected: 01/12/18 10:09 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 20:17	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 20:17	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 20:17	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 20:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 20:17	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 20:17	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 20:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 20:17	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 20:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 20:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 20:17	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 20:17	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 20:17	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-1BR **Lab ID: 2069189012** Collected: 01/12/18 10:09 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 20:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 20:17	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 20:17	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 20:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:17	10061-02-6	
Enflurane	**2.1**	ug/L	1.0	1		01/23/18 20:17	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 20:17	100-41-4	
Haloether 229	**1.4**	ug/L	1.0	1		01/23/18 20:17		
Haloether 406	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 421	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 427	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 428	ND	ug/L	1.0	1		01/23/18 20:17		
Haloether 508	**8.0**	ug/L	1.0	1		01/23/18 20:17		
Haloether 528	ND	ug/L	1.0	1		01/23/18 20:17		
Halomar	**1.1**	ug/L	1.0	1		01/23/18 20:17		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 20:17	591-78-6	
Isoflurane	**10**	ug/L	1.0	1		01/23/18 20:17		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 20:17	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 20:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 20:17	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 20:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 20:17	79-34-5	
Tetrachloroethene	**1.0**	ug/L	1.0	1		01/23/18 20:17	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 20:17	108-88-3	
Total Haloether	**22.6**	ug/L	1.0	1		01/23/18 20:17		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 20:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 20:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 20:17	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 20:17	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 20:17	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 20:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 20:17	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%.	79-119	1		01/23/18 20:17	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	68-124	1		01/23/18 20:17	460-00-4	
Dibromofluoromethane (S)	98	%.	72-126	1		01/23/18 20:17	1868-53-7	

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-4 **Lab ID: 2069189013** Collected: 01/12/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 20:35	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 20:35	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 20:35	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 20:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 20:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 20:35	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 20:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 20:35	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 20:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 20:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 20:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 20:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 20:35	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 20:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 20:35	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 20:35	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 20:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:35	10061-02-6	
Enflurane	ND	ug/L	1.0	1		01/23/18 20:35	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 20:35	100-41-4	
Haloether 229	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 406	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 421	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 427	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 428	ND	ug/L	1.0	1		01/23/18 20:35		
Haloether 508	**3.1**	ug/L	1.0	1		01/23/18 20:35		
Haloether 528	ND	ug/L	1.0	1		01/23/18 20:35		
Halomar	ND	ug/L	1.0	1		01/23/18 20:35		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 20:35	591-78-6	
Isoflurane	**2.1**	ug/L	1.0	1		01/23/18 20:35		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 20:35	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 20:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 20:35	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 20:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 20:35	79-34-5	
Tetrachloroethene	**1.3**	ug/L	1.0	1		01/23/18 20:35	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 20:35	108-88-3	
Total Haloether	**5.2**	ug/L	1.0	1		01/23/18 20:35		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 20:35	79-01-6	

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(504)469-0333

ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-4 **Lab ID: 2069189013** Collected: 01/12/18 11:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 20:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 20:35	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 20:35	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 20:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 20:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 20:35	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%.	79-119	1		01/23/18 20:35	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	68-124	1		01/23/18 20:35	460-00-4	
Dibromofluoromethane (S)	99	%.	72-126	1		01/23/18 20:35	1868-53-7	

Sample: MW-4D-2 **Lab ID: 2069189014** Collected: 01/12/18 12:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 20:52	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 20:52	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 20:52	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 20:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 20:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 20:52	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 20:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 20:52	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 20:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 20:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 20:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 20:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 20:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/23/18 20:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 20:52	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 20:52	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 20:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 20:52	10061-02-6	
Enflurane	**1.4**	ug/L	1.0	1		01/23/18 20:52	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 20:52	100-41-4	
Haloether 229	**1.3**	ug/L	1.0	1		01/23/18 20:52		
Haloether 406	ND	ug/L	1.0	1		01/23/18 20:52		
Haloether 421	ND	ug/L	1.0	1		01/23/18 20:52		
Haloether 427	ND	ug/L	1.0	1		01/23/18 20:52		

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-2 **Lab ID: 2069189014** Collected: 01/12/18 12:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Haloether 428	ND	ug/L	1.0	1		01/23/18 20:52		
Haloether 508	**3.8**	ug/L	1.0	1		01/23/18 20:52		
Haloether 528	ND	ug/L	1.0	1		01/23/18 20:52		
Halomar	ND	ug/L	1.0	1		01/23/18 20:52		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 20:52	591-78-6	
Isoflurane	**8.7**	ug/L	1.0	1		01/23/18 20:52		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 20:52	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 20:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 20:52	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 20:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 20:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		01/23/18 20:52	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 20:52	108-88-3	
Total Haloether	**15.2**	ug/L	1.0	1		01/23/18 20:52		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 20:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 20:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 20:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 20:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 20:52	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 20:52	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 20:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 20:52	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%.	79-119	1		01/23/18 20:52	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	68-124	1		01/23/18 20:52	460-00-4	
Dibromofluoromethane (S)	103	%.	72-126	1		01/23/18 20:52	1868-53-7	

Sample: MW-4D-3 **Lab ID: 2069189015** Collected: 01/12/18 13:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Acetone	ND	ug/L	4.0	1		01/23/18 21:10	67-64-1	
Acrolein	ND	ug/L	8.0	1		01/23/18 21:10	107-02-8	
Acrylonitrile	ND	ug/L	4.0	1		01/23/18 21:10	107-13-1	
Benzene	ND	ug/L	1.0	1		01/23/18 21:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		01/23/18 21:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/23/18 21:10	75-25-2	
Bromomethane	ND	ug/L	1.0	1		01/23/18 21:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	2.0	1		01/23/18 21:10	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		01/23/18 21:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		01/23/18 21:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/23/18 21:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/23/18 21:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/23/18 21:10	67-66-3	

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ANALYTICAL RESULTS

Project: 2SAR2017
Pace Project No.: 2069189

Sample: MW-4D-3 **Lab ID: 2069189015** Collected: 01/12/18 13:01 Received: 01/20/18 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV HALOETHERS	Analytical Method: EPA 5030B/8260							
Chloromethane	ND	ug/L	1.0	1		01/23/18 21:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		01/23/18 21:10	124-48-1	
Dibromomethane	ND	ug/L	1.0	1		01/23/18 21:10	74-95-3	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/23/18 21:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 21:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/23/18 21:10	10061-02-6	
Enflurane	**5.1**	ug/L	1.0	1		01/23/18 21:10	13838-16-9	
Ethylbenzene	ND	ug/L	1.0	1		01/23/18 21:10	100-41-4	
Haloether 229	**6.8**	ug/L	1.0	1		01/23/18 21:10		
Haloether 406	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 421	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 427	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 428	ND	ug/L	1.0	1		01/23/18 21:10		
Haloether 508	**7.9**	ug/L	1.0	1		01/23/18 21:10		
Haloether 528	ND	ug/L	1.0	1		01/23/18 21:10		
Halomar	**1.4**	ug/L	1.0	1		01/23/18 21:10		
2-Hexanone	ND	ug/L	2.0	1		01/23/18 21:10	591-78-6	
Isoflurane	**27.0**	ug/L	1.0	1		01/23/18 21:10		
Methoxyflurane	ND	ug/L	1.0	1		01/23/18 21:10	76-38-0	
Methylene Chloride	ND	ug/L	5.0	1		01/23/18 21:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2.0	1		01/23/18 21:10	108-10-1	
Styrene	ND	ug/L	1.0	1		01/23/18 21:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/23/18 21:10	79-34-5	
Tetrachloroethene	**2.9**	ug/L	1.0	1		01/23/18 21:10	127-18-4	
Toluene	ND	ug/L	1.0	1		01/23/18 21:10	108-88-3	
Total Haloether	**48.1**	ug/L	1.0	1		01/23/18 21:10		
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/23/18 21:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/23/18 21:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/23/18 21:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/23/18 21:10	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		01/23/18 21:10	76-13-1	
Vinyl chloride	ND	ug/L	1.0	1		01/23/18 21:10	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		01/23/18 21:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/23/18 21:10	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%.	79-119	1		01/23/18 21:10	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	68-124	1		01/23/18 21:10	460-00-4	
Dibromofluoromethane (S)	101	%.	72-126	1		01/23/18 21:10	1868-53-7	

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WO# : 2069189

2069189

CHAIN-OF-CUSTOD

The Chain-of-Custody is a LEG

Pace Analytical

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Page : 1 Of 1

Regulatory Agency

State / Location: PR

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Requested Analysis Filtered (Y/N)): VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	TB-20180111	WT	G			01/11/18	LAB		2				2						X		
2	EB-20180111	WT	G			01/11/18	0800		3				3					X			
3	FB-20180111	WT	G			01/11/18	1025		3				3					X			
4	MW-1B-3	WT	G			01/11/18	1101		3				3					X			
5	MW-1B-2	WT	G			01/11/18	1129		3				3					X			
6	PCMW-1	WT	G			01/11/18	1219		3				3					X			
7	ES-19	WT	G			01/11/18	1310		3				3					X			
8	AWPI-MW-1	WT	G			01/11/18	1358		3				3					X			
9	AWPI-MW-2	WT	G			01/11/18	1435		3				3					X			
10	EB-20180112	WT	G			01/12/18	0820		3				3					X			
11	FB-20180112	WT	G			01/12/18	0930		3				3					X			
12	MW-4D-1BR	WT	G			01/12/18	1009		3				3					X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andrí Colon / Arcadis	01/12/18	1546	[illegible]	01/12/18	1546	4°	Y	N	Y
	FedEx	1/20/18	945	[illegible] / Pace	1/20/18	945	1.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrí Colon

SIGNATURE of SAMPLER: [signature]

DATE Signed: 01/12/18

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Arcadis
Address:	#48 City View Plaza 1 Suite 401
	Rd 165 KM 1.2, Guaynabo, PR 00968
Email:	
Phone:	Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Elvin Varela
Copy To:	
Purchase Order #:	
Project Name:	Fibers 2SAR2017(PO#: CO001911.0005.1702
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	craig.mccollum@pacelabs.com,
Pace Profile #:	1037 L12

Regulatory Agency

State / Location
PR

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): VOC 8260	VOC 8260-Trip Blank	DI H2O	Residual Chlorine (Y/N)
1	MW-4D-4	WT	G			01/12/18	1101		3				3					X			
2	MW-4D-2	WT	G			01/12/18	1209		3				3					X			
3	MW-4D-3	WT	G			01/12/18	1301		3				3					X			
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Andi Colon / Arcadis	01/12/18	1546	[illegible] - Pace	01/12/18	1546	4.0	Y	N	Y
	FedEx			[illegible] Pace	1/20/18	945	1.1	y	y	y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andi Colon

SIGNATURE of SAMPLER: [illegible]

DATE Signed: 01/12/18

Arcadis U.S., Inc.

410 N. 44th Street

Suite 1000

Phoenix, Arizona 85008

Tel 602 438 0883

Fax 602 438 0102

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